Better **Solutions,** Built **Together**

RAIKES SCHOOL DESIGN STUDIO

2024-2025

Design Studio
Annual Showcase

What is Design Studio?

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In the heart of the Jeffrey S. Raikes School of Computer Science and Management lies Design Studio, the capstone program that brings leading industry sponsors, innovative startups, and researchers together with the best and brightest students to dream and build high-tech solutions for today's problems.

Our Approach

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As an experiential learning program, Design Studio engages third- and fourth-year students to solve real-world, technical problems by partnering with companies, startups, and organizations. A cornerstone of the Raikes School curriculum for more than 20 years, Design Studio is key to helping students see the impact of their work as they use their skills to deliver value to sponsors through hands-on projects.

Find us at raikes.unl.edu/design-studio to partner with us on a project in Design Studio!

CONTENTS

This report showcases the past year in Design Studio:

WELCOME to SHOWCASE

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CELEBRATING A YEAR OF GROWTH AND INNOVATION

We are thrilled to share the culmination of a full year of projects. These students have given their best to tackle tough business problems using what they knew already and learning the rest as the year progressed. The projects span a diversity of industries, technologies, skills, and organization sizes. Throughout all of them, the common theme is the collaboration of our students, sponsors, advisors, coaches, staff, and faculty. We understand that when we work together, we build better solutions.

This year we have seen many projects pushing students beyond their comfort zone into a growth area as they take the lessons learned from their academics and apply them to the real world. We've also seen sponsors increase their knowledge by having the student teams sharing their expertise. This partnership is a key ingredient of Design Studio's success.

EMPOWERING STUDENT ENTREPRENEURS

We've continued to improve our student-led Startup Studio offering for students wanting to work on an entrepreneurial project of their own. This year, we partnered with Invest Nebraska to provide financial backing to the startups selected at our spring pitch event. All teams went through full business entity formation including an early equity round as part of their experience. This approach provided education on building a startup from ground zero, allowing student teams to invest in marketing, services, and resources—just like any real-world venture. This gets the students closer to a launch upon graduation rather than simply a classroom experience. Their success in turn inspires the next wave of new software solutions.

THANKFUL FOR OUR JOURNEY TOGETHER

This experiential learning capstone would not be possible without our amazing sponsors, mentors, advisors, coaches, speakers, and other volunteers who generously do anything they can to help these students be successful. Similarly, we are thankful for the faculty, staff, and other University partners that help our students at every turn. On behalf of all students, I thank you for your commitment and the impact you have made. We are truly grateful.

Rob Nickolaus
Director of
Design Studio

"
The common theme of
our projects is
collaboration of
students, sponsors,
advisors, coaches,
staff, and faculty.
"

Year in Review

113
Students

29
Weeks Over
2 Semesters

21
Projects

21
Coaches

12–15
Hours
Per Week

4–6
Students
Per Team

5
Faculty

2
Research
Projects

4
Student
Startups

Design Studio Prepares Students for the Workforce by Emphasizing:

1. Project Management Skills

2. Leadership

3. Teamwork

4. Human-Centered Design

5. Business Value

6. Customer Discovery

7. Emerging Technologies

From Vision to Impact, Together We Thrive

Nebraska's leading companies and organizations are transforming visions into impact by empowering students to tackle complex challenges using proven and emerging technologies. Through these important partnerships, students gain invaluable real-world experience, working as fast and agile teams. Sponsors, in turn, benefit from innovative perspectives and fresh solutions to their business challenges.
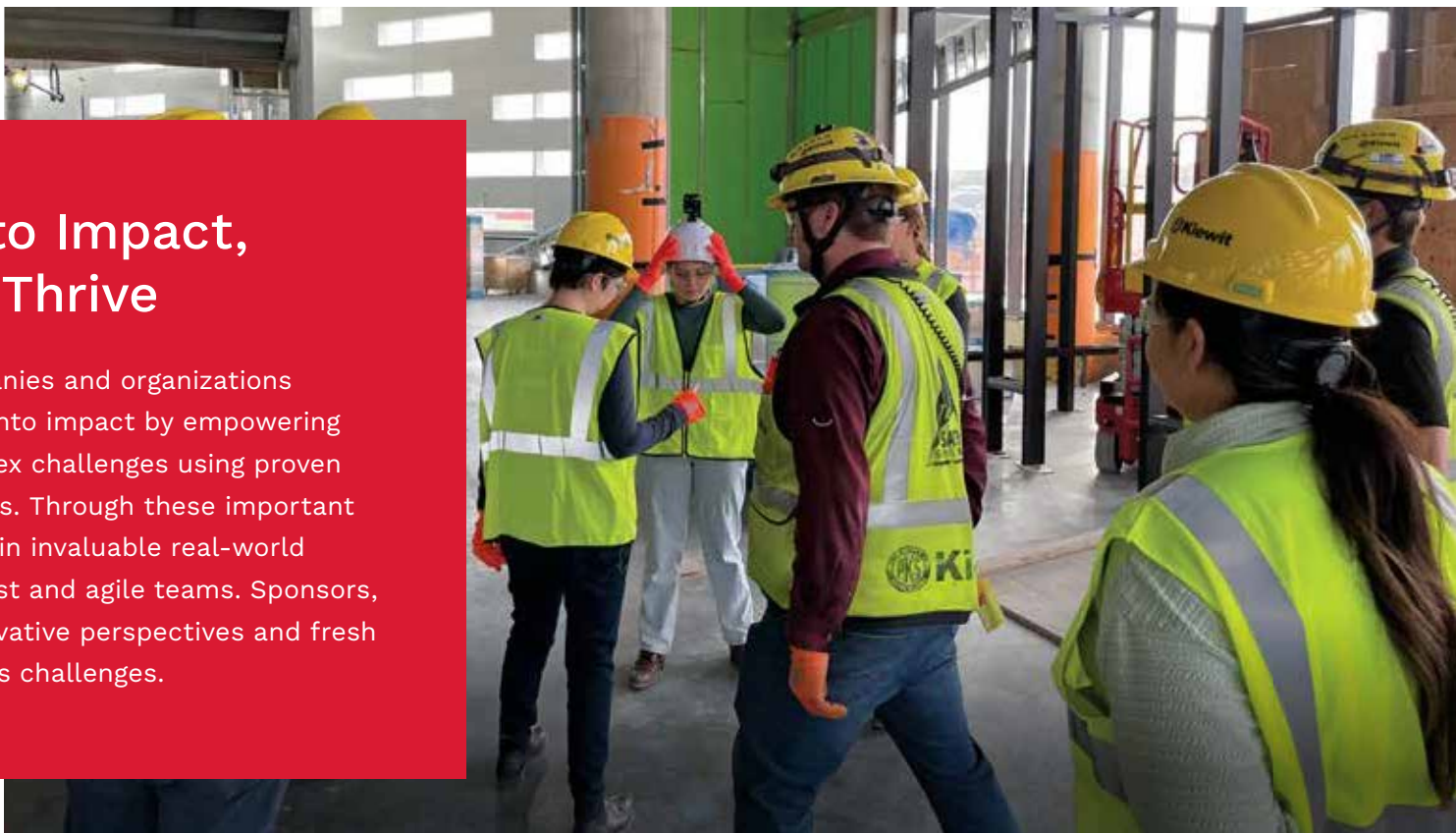
Allo | Page 10

Transform ALLO SmartTown network data into meaningful insights that help improve security, detect potential threats, and optimize performance.

Allstate | Page 11

Build an easy-to-use dashboard that tracks customer lifetime value trends, increasing transparency and enabling Allstate's teams to make data-driven decisions.

Buckle | Page 12

Create a robust AI-powered application to connect Buckle customers with the perfect product for any occasion, resulting in the most enjoyable shopping experience.

Buildertrend | Page 13

Develop an automated project manager agent that provides periodic summarizations for residential contractors to assist supervision of project timelines and streamline progress updates.

Conagra Brands | Page 14

Enhance Conagra Brands' capital expenditure decision-making by building a model that examines historical data on depreciation, offering detailed insights into its impact on margins and allowing for precise, granular analysis across the company.

DMSi | Page 15

Develop a data-driven inventory optimization tool that forecasts demand and streamlines purchasing, empowering DMSi customers to maximize profitability and improve satisfaction through optimal inventory management.

ECHO Collective | Page 16
Sponsored by Spreetail Foundation

Empower New American women by creating a Learning Management System designed for multicultural needs that will support their business and technology education.

Farm Credit Services of America | Page 17

Empower customers to effortlessly manage their financial data through personalized conversational workflows, transforming the way they interact with their finances into a seamless, insightful, and engaging experience.

HDR | Page 18

Provide HDR a comprehensive risk analysis tool that understands past experiences to provide future insights.

Hudl | Page 19

Use a large-language model to harness Hudl's underutilized data to generate game content that improves streaming and ticketing visibility while enriching the fan experience.

Kiewit | Page 20

Find innovative ways to attract and educate students from all engineering backgrounds so they will consider an exciting career in construction and ensure students view Kiewit as the construction and engineering employer of choice.

Mutual of Omaha | Page 21

Develop a robust retrieval augmented generation architecture for an AI-powered Claims Assistant to deliver accurate policy and rider information, streamlining operations and boosting productivity for Mutual of Omaha associates.

Nelnet | Page 22

Leverage artificial intelligence to find data-driven insights in student performance that empower education professionals to improve the learning environment in their classroom.

Olsson | Page 23

Create a discretionary funding dashboard for Olsson's Funding Strategy Team to reduce hours spent manually sifting for information and to create an efficient matching algorithm for customer projects and funding opportunities.

Scoular | Page 24

Develop a comprehensive system for Scoular that facilitates seamless data transfer and communication with third-party logistics (3PL) partners, enabling accurate tracking, efficient management, and strategic utilization of inventory data.

Signature Performance | Page 25

Elevate operational capabilities across service lines at Signature Performance by deploying WorkflowXM, a dynamic, no-code workflow engine that enables the design and execution of complex workflows without technical intervention.

Tenaska | Page 26

Build a real-time, responsive web application monitoring Tenaska's natural gas pipelines to give schedulers more of their time back.

STARTUP STUDIO

From pitch competition to reality: four ambitious student startups came to life this year, powered by Invest Nebraska and their matching partners who recognized these ventures' potential. In Startup Studio, aspiring entrepreneurs don't just dream—they build. Students earn capstone credit while dedicating themselves fully to launching their businesses, and their peers gain invaluable startup experience alongside them. This hands-on approach to entrepreneurship does more than create new companies—it sparks a culture of innovation that inspires students to transform bold ideas into groundbreaking solutions.

brainrotcode | Coding contests on games | Page 28

Build an interactive web platform to enable developers to create, compare, and visualize gaming algorithms and machine learning models.

Cattle Kettle | The future of stock tank management | Page 29

Build a remote water management solution designed for ranchers, allowing them to monitor tank levels and control pumps from anywhere, saving time and ensuring their livestock always have access to water.

Privy AI | Automating physical therapy note-taking | Page 30

Build a streamlined electronic health record documentation system to allow physical therapists to focus more time on patient care.

TeachFront | The new wave of equitable assessment | Page 31

Develop and build a platform that supports alternative grading systems, encouraging equitable education and modeling our mission of lifelong learning.

RESEARCH STUDIO

Research and innovation go hand-in-hand to drive new discoveries and create positive change. This year, two of our students completed their Design Studio capstone by applying their unique multidisciplinary skills to tackle complex challenges. Working alongside faculty mentors across the University, they investigated new ways of doing things and put their theories to the test.

Video Games and Cognitive Processing
Jake Rance | Page 32

Research question: How does video game experience impact oculomotor control and cognitive processing?
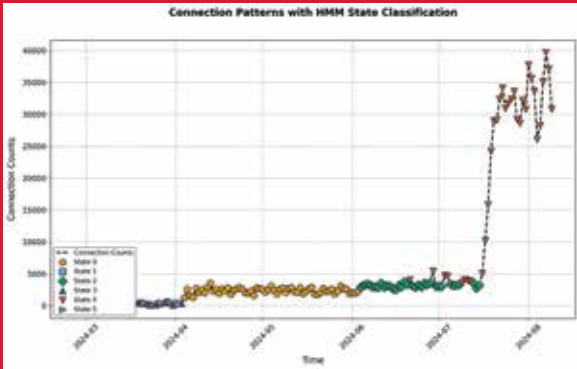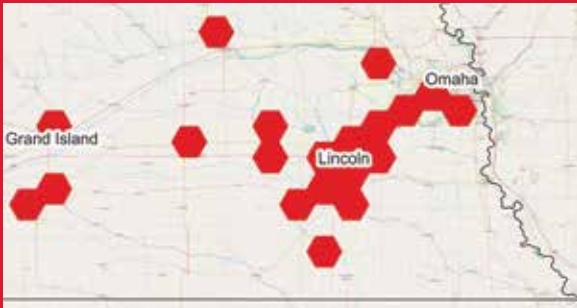
ARG-V
Charles Moloney | Page 33

Research question: How can we automate the production of software verification benchmarks for symbolic execution of code that includes floating point numbers and integer arrays?

LEFT:
A SmartTown router located in Lincoln, NE.

BELOW:
Map of SmartTown rollout locations in the Nebraska area.

Anomaly detection model output. Classifies connections into different states (color groups) to determine potential fraud or areas of concern.

![ALLO FIBER logo]

Machine Learning for SmartTown Network Insights

ALLO Fiber is a Lincoln-based, all-fiber optic Internet, TV, and phone company. The company provides services to business, residential, and governmental customers in Nebraska, Colorado, and Arizona, and is swiftly expanding in these states.

One of the ways ALLO is expanding is by rolling out SmartTown, a Wi-Fi network that optimizes traffic by sharing its network load amongst other routers in the network. SmartTown will allow customers to authenticate and connect to a high-speed fiber network and enjoy strong connectivity even outside their homes. To achieve this, ALLO has partnered with Calix, a platform, cloud, and managed services company. Calix provides the routers and data necessary to roll out and monitor SmartTown in new areas.

With a large project like this comes many concerns, such as cybersecurity, market performance, and connectivity issues or gaps. To address these issues, the Design Studio team built two machine learning models, one to identify anomalies and large-scale fraud threats like botnet attacks and a second to perform factor analysis, which detects driving factors for change in network usage. The Anomaly Detection model classifies connection intervals into different states. Then, it uses the information about the states to identify outliers and flag them as anomalous. The Factor Analysis model takes a much more mathematical approach to identify whether factors such as router age, SmartTown rollouts, and router type affect network usage, and if so, to what extent.

These solutions allow ALLO to continue its rollouts of SmartTown with a deeper understanding of their connectivity data and the ability to detect and prevent large-scale fraud that would otherwise disrupt the SmartTown user experience.

TEAM

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Lifetime Value Insights Monitoring Dashboard

Allstate is one of the largest insurance companies in the country and works with a diverse customer base ranging from long-term policyholders to newer clients exploring coverage options. Over the last several years, a team of Allstate data scientists has leveraged customer insurance policy information and customer characteristics to predict the long-term retention and costs of newly acquired Allstate customers using machine learning models. Currently, lifetime value (LTV) predictions help Allstate leadership understand the long-term impact of short-term decision making. However, there are still many business units missing out on the opportunity to use these insights to improve their decision making and the lack of LTV transparency is inhibiting enterprise adoption.

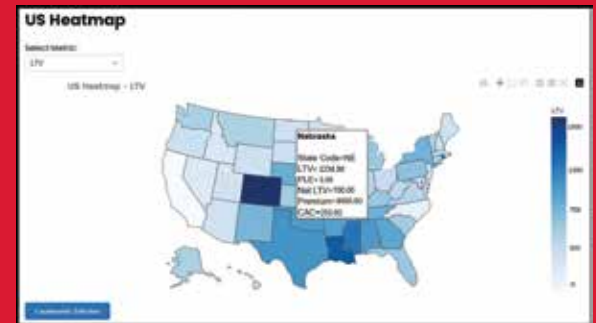To address this challenge, the Design Studio team developed a centralized dashboard that visualizes historical trends and the current performance of LTV figures. By aggregating the most recent data collected on a weekly basis, the dashboard empowers teams across departments—such as marketing, finance, and product management—to make faster, data-driven decisions in real time. Key features include customizable date ranges, segmentation options, and dynamic visualizations that allow users to filter data by state and policy type.

The Lifetime Value Insights Monitoring Dashboard drives significant business value by consolidating LTV monitoring into a single, intuitive platform, reducing the time spent on data gathering and interpreting. With key features like dynamic trend visualizations and model explainability plots, the dashboard fosters transparency into the metric, enabling internal teams like marketing or finance to readily identify high-value customers, optimize spending strategies, and drive enterprise-wide adoption of using LTV for decision making.
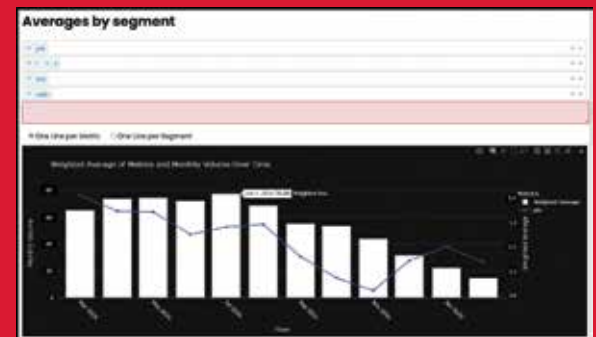

A dynamic heat map visualization of LTV metrics across the U.S.

A dynamic plot that users can filter and segment by to glean insights.

A model explainability visualization that depicts the average policy life expectancy when selecting for number of years of prior insurance.

TEAM

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The main page of the AI shopping assistant application, which displays a user question and generated results.

Visualized diagram of the RAG pipeline that powers the AI shopping assistant.

An SQL table of a product's generated tags, used to provide descriptive context to the RAG model.

Buckle

AI Shopping Assistant

Buckle, Inc. is a leading retailer of high-quality casual apparel, footwear, and accessories for fashion–conscious men and women. Headquartered in Kearney, Nebraska, the company currently operates over 440 stores in more than 40 states. Buckle prioritizes providing the best possible guest experience through individual customer services.

Through this project, Buckle aims to optimize the shopping experience by integrating our natural language search solution into their existing internal applications. This will allow internal users to help customers find the perfect product for any occasion.

The Design Studio team developed a model powered by Retrieval Augmented Generation (RAG) to enhance the search experience. This allows users to find products using natural language instead of a typical keyword search. Current solutions may show the user products that aren't contextually relevant to their search, which is not effective. For example, a search for "winter vibes" won't return scarves because "winter" isn't a keyword in the product name for scarves.

The Design Studio team used Anthropic's Claude Sonnet model to create lists of words ('tags') that describe each of the provided products' features. The team created these tags to enhance the model's knowledge about the Buckle products and give it context so the model can make the best recommendation. This solution improves the clothing shopping experience by allowing for more flexibility when looking for the perfect product. Instead of needing to use rigid keywords to find a specific clothing item, a user can use natural language to find products that fit any occasion.

TEAM

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Buildertrend

Automated Project Manager

Buildertrend is the leading construction project management software for home builders, remodelers, and contractors. Based in Nebraska, Buildertrend serves over a million construction workers by offering a single platform that simplifies business operations. Additionally, Buildertrend leverages data from construction projects to deliver value to each customer.

Focusing on client connections, the Design Studio team explored how emerging technologies could enhance communication between homeowners and contractors. Clients can currently track project progress via multiple channels, including documentation like daily logs and to-do items. However, a more tailored message for homeowners would be beneficial, though this requires contractors to spend time away from the project to write reports.

Utilizing artificial intelligence, the team developed an automated project manager agent to generate periodic reports for homeowners. By consolidating essential data, this streamlined the process of creating progress update reports, thus saving valuable time. Project managers only need to refine this information to send out. Regular communication through these reports helps build trust with homeowners while allowing contractors to focus on the project.

A preview of the final report that summarizes data that was recorded from an on-site construction project manager.
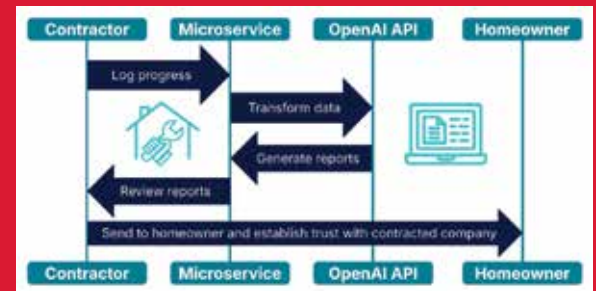
A conceptual sequence diagram of how a contractor's data is transformed through Buildertrend services into a ready progress report.

TEAM
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Arjun Ramesh

Natalia Trejo
Roy Truong

The main Power BI dashboard that visualizes historical and projected depreciation across all company assets.
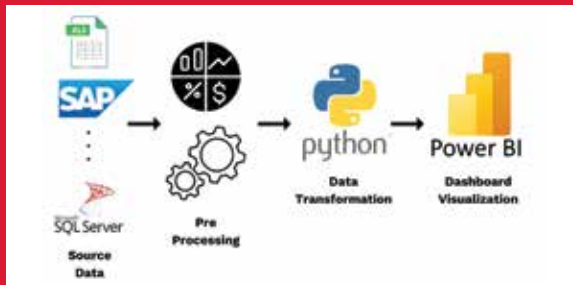
A workflow diagram outlining the script's data processing, transformation, and visualization steps.

The brand view showing depreciation comparison for eight selected brands.

DepEx - Depreciation Exploration and Visualization

Conagra Brands, a leading food industry company, combines tradition with innovation and an entrepreneurial mindset. With 42 manufacturing facilities and 18,600 employees, Conagra Brands generates $12.3 billion in annual revenue, supporting strategic reinvestments, such as capital expenditure. These investments impact profitability and cost, particularly through depreciation. However, due to the vast number of assets and the dispersion of data across multiple sources, Conagra Brands faces challenges in effectively visualizing depreciation.

The Design Studio Team developed an automated solution to analyze and visualize Conagra Brands' historical depreciation, focusing on projected outlooks. To achieve this, the team created Python scripts to aggregate and calculate depreciation over time for all current and future assets. The team integrated these scripts with a Power BI dashboard to create a comprehensive and interactive visualization of depreciation data.

The Power BI dashboard provides Conagra Brands with a dynamic tool to analyze depreciation across multiple dimensions, including fiscal year, quarter, and period, as well as by manufacturing facility, brand, segment, and asset type. This solution consolidates data from various sources, delivering a clear and actionable summary of both current and future investments. These insights help Conagra Brands make more informed investment decisions, ultimately enhancing return on investment and driving greater shareholder value.

TEAM

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Forecasting and Inventory Optimization Program

DMSi (Distribution Management Systems Inc.) provides integrated business management software for inventory, sales, and purchasing. Currently, customers manually estimate future demand and create purchasing plans using complex math, a time-consuming process prone to errors that can lead to overstock or stockouts. This process is extremely time inefficient, as there are multiple stages to ensure accurate depictions of what trends will look like. If there are human errors in calculations, overstock or stockout could occur.

The Design Studio team developed a solution to automate demand tracking and forecasting. They created a two-page website displaying inventory predictions and ordering forecasts powered by machine learning (ML) algorithms. Research focused on SARIMAX, a time series forecasting model that accounts for seasonal patterns and external variables, and CatBoost, a gradient boosting algorithm, to develop demand forecasting. Additionally, Demand Driven Material Requirements Planning (DDMRP), a methodology used to calculate the optimal purchasing quantity to meet future demand, was employed to ensure accurate planning.

These models predict demand up to 30 days ahead and suggest inventory quantities needed to meet it. With this prediction, the program states what quantity of inventory should be bought to meet potential demand. On the search page, items are sorted based on what has the highest purchasing priority. Priority is based on the current stock as compared to the forecasted demand.

The website enables DMSi customers to quickly determine necessary orders and quantities without complex calculations, saving time and making planning accessible to non-specialists.

The search page, showing an inventory prediction table with forecasted demand, warehouse details, stock status, and interactive search filters.

The sales projection page, displaying a graph comparing actual vs. predicted sales with zoom and pan functionality for detailed analysis.

TEAM

Grace Boguslawski
Reilley Einspahr
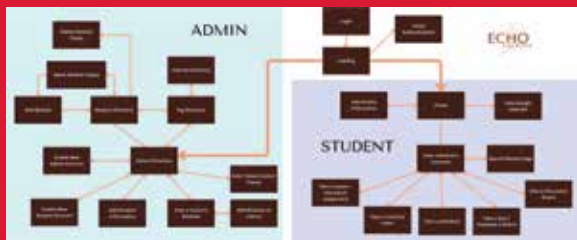Ahmed Mahdi

Aaron Morrissey
Caden Punteney

Diagram of LMS solution's web pages, showing how users can navigate through administrator or student pages depending on their credentials.

Overview of active learning modules created. Here, administrators can edit and review learning content.

Student's view of learning content within a module. Students can search for and interact with embedded content such as YouTube videos, presentations, and quizzes.

Sponsored by **Spreetail** FOUNDATION

ECHO Collective Learning Management System

ECHO Collective is a non-profit founded during the Covid-19 pandemic that provides opportunities and connections for refugee and immigrant women in the Lincoln area. Its education program, the Refinery, selects a small group of entrepreneurial women twice a year for a 4-month business course.

Currently, assignments and lessons for the Refinery program are provided in paper notebooks. Students manually translate their books, contact instructors via WhatsApp for questions, and check the ECHO Collective homepage for event and program information. As the program grows, this system becomes more overwhelming for instructors. Furthermore, the 4-month duration limits technology education, leaving students uncertain about how to build their tech skills and confidence.

The Design Studio team's solution is a customized learning management web application designed for the multicultural needs of the Refinery's students. After investigating systems like Canvas and Google Classroom, ECHO Collective found these options to be too complex and expensive for users with low tech literacy. To counter this, the Design Studio team built a custom solution that limits user confusion by removing unnecessary or irreversible actions. The learning management system also provides clear directions for each action. This solution enables Refinery students to build confidence in technology while streamlining the learning process.

TEAM

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CropCents

Farm Credit Services of America (FCSA) is a financial cooperative that provides credit and insurance to farmers, ranchers, agribusinesses, and rural residents. To evaluate a customer's eligibility for loans, insurance policies, and other financial support, FCSA requires detailed financial information, often through documents like the balance sheet.

Currently, FCSA's balance sheet filing process is inefficient. Many customers lack expertise in financial statements, making it difficult to complete the balance sheet. The existing online tool (AgriPoint) requires specialized accounting knowledge, prompting many producers to rely on Financial Officers for assistance. As a result, FCSA's Financial Officers spend significant time guiding customers through the process, sometimes even traveling to their homes for support.

To address this challenge, the Design Studio team developed CropCents, a web application designed to simplify the balance sheet reporting process in a more conversational and intuitive way. The tool operates under its own web domain, allowing users to sign in with their FCSA credentials and create a balance sheet through a series of curated prompts. By breaking down the filing process into clear, manageable sections, CropCents enables users to complete their balance sheets independently. This not only eases the process for customers but also allows Financial Officers to focus on offering valuable advice and addressing other areas where their expertise is needed.

At the start, users select items relevant to their operation, guiding the rest of the conversation based on their choices.

Users receive prompts based on previous selections, reducing unnecessary steps in the filing process and saving time.

The final page allows users to add or delete items, ensuring the final report accurately represents their financial position.

TEAM

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Final Answer:

The permit approvals required for this specific engineering project are environmental permits. The regulatory bodies responsible for issuing these permits are the New York State Department of Environmental Conservation (NYSDEC) and the New York City Department of Environmental Protection (NYCDEP). The Design-Builder, HDR, is advised to hold a pre-application meeting with NYSDEC and coordinate with NYCDEP within 60 days from NTP (Notice to Proceed). If during the project, the Design-Builder introduces design elements, variations, or methodologies that potentially induce environmental impacts not covered under the obtained approvals/permits, then the Design-Builder shall re-evaluate the NEPA process for this Project and obtains the necessary Environmental Approvals/Permits for the Project prior to proceeding with construction. This requirement also applies to proposed variations which may affect resources covered under Section 106, Section 4(f), Executive Order 11990 (wetlands), and other applicable federal and state environmental regulations. (Source: D900043 - Part 3 - Project Requirements_CONFORMED.pdf, Pages: [34, 110])

This response does not constitute legal advice. Consult with legal counsel if legal advice is required.

The model answers a risk-related question by summarizing relevant information from data sources.

The model uses Advanced Retrieval Augmented Generation techniques to pick relevant data sources and appropriate information.

Keen Insights

HDR is an architecture, engineering, environmental, and consulting company known for adding beauty and structure to communities.

HDR's projects each face complex risk factors, including various permitting and regulatory requirements, managing deadlines, and coordinating with multiple stakeholders. One of the ways HDR mitigates risk is through senior management oversight. HDR could strengthen that process through resilience to employee changes, like retirement and new hires, and to human error. Imagine a manager newer to the business, preparing for a meeting with HDR's Risk Committee. HDR wondered if there was a way that the manager could utilize the experience, insights, and industry acumen of previous HDR employees.

The Design Studio team was challenged to create a software tool to uncover project risk factors and encourage employees to think critically about project outcomes.

The team proposed and built a machine learning model to retrieve information from data sources like key project documents and legal databases—uncovering critical risk factors. The team worked with HDR executives to list strategic questions targeting important aspects of project risk. The final model identifies risks for employees to understand and explore further. By using this software, employees at all levels of the company can start answering questions that HDR's senior management consider when making project decisions. The software allows HDR to spread leadership's data and industry instincts throughout the company to produce pivotal project insights at early stages of the project process.

TEAM

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Tia Ybarra

AI-Powered Sport Storytelling from Event Data

Hudl is a sports media company based in Lincoln Nebraska dedicated to helping teams and players reach their full potential. The Hudl Fan Platform focuses on delivering content for fans everywhere—enabling fans to find livestreams, ticketing, highlights, rosters and more. While Hudl Fan events are automatically created and listed on the site, they provide little context or narrative to excite fans about the game.

Currently fans struggle to find the content they want, making it difficult to stay updated and engaged with their teams. Family members have trouble locating streams, and players miss out on the recognition they deserve. Hudl could manually create engaging stories for each event to address these challenges, but this approach isn't scalable.

Recent advancements in AI and large language models (LLMs), combined with Hudl's metadata, presented an opportunity to automate compelling content generation. By leveraging AI, the team dynamically created narratives to drive fan engagement, effectively direct fans to ticketing and streaming, and enhance the overall fan experience.

The Design Studio team developed a process to generate pregame articles demonstrating how Hudl can use LLMs to address these challenges. By generating pre-game articles, the team aimed to build excitement, provide valuable context, and tell the story of each game in a way that captivated fans. This would encourage fans to make Hudl their go-to hub for team updates, which in turn fuels engagement, ticket sales, and ad revenue.

TEAM
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Charles Moloney
Zainab Ridha

Jace Ruth
Jack Smiley
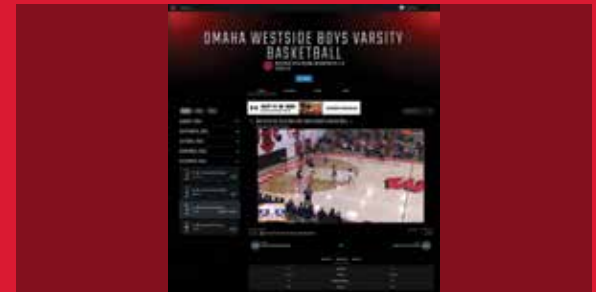
The key stats tab is an updated feature to showcase key team stats in the matchup.

The overview tab displays our full AI-generated summary for the matchup.

The current fan page shows no compelling narrative in either stats or summary.

Piping within the walls of the Omaha Public Library, overlaid with a virtual model built with Blender.

Still frame of the introductory video welcoming perspective talent to their day as a field engineer.

A Jobsite Trailer built in Unity provides individuals with an overview of what they will experience before entering the site.

Kiewit FieldVision

Kiewit is one of North America's largest and most respected construction and engineering organizations, employing over 30,000 people.

Field engineers are in high demand, and Kiewit wants to ensure that they can hire the best employees. Kiewit's recruiting team engages with students on campus through career fairs, affiliation meetings, or classroom presentations. At these events, recruiters must quickly convey Kiewit's expansive operations, job opportunities, and responsibilities. At these events, Kiewit has found that prospective candidates do not know how their education can transition to a construction career, especially regarding the job duties of a field engineer.

The Design Studio team was tasked with developing an interactive virtual reality (VR) application to use at career fairs to recruit new talent. The team built an application showing a "Day in the Life" of a Kiewit Field Engineer on the Omaha Public Library construction site. The application takes individuals through the entire construction site experience, starting in the construction trailer and providing an interactive experience that leaves students saying, "I did that." By creating a scalable Talent Acquisition product, Kiewit is better equipped to engage applicants during recruiting events.

TEAM

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Claims genAI Copilot

Mutual of Omaha is a Fortune 300 company founded in 1909 that provides insurance and financial services to individuals, groups, and businesses. The insurance industry is struggling to keep up with modern advancements, with nearly 75% of insurance companies still relying on outdated legacy systems for core business functions. To stay competitive and get ahead of the curve, Mutual of Omaha needed to modernize its claims processing system.

The Design Studio team was tasked with creating a solution to streamline the claims process, reducing the time specialists spend searching through policy and rider documents while also improving training efficiency for new employees. In collaboration with

Mutual of Omaha's genAI team, the Design Studio team developed an AI-powered tool that leverages Large Language Models (LLMs) to assist claims specialists. Using AWS Bedrock Agents, metadata filtering, prompt engineering, and document storage in S3, the team integrated this system into a user-friendly Gradio interface.

This AI-powered solution modernizes Mutual of Omaha's claims system by significantly reducing search time, expediting claims processing, and decreasing onboarding hours for new employees. By replacing antiquated processes with intelligent automation, Mutual of Omaha is enhancing operational efficiency and positioning itself as a leader in insurance technology.

Example conversation between a Benefit Claims Specialist and the Claims genAI Copilot.
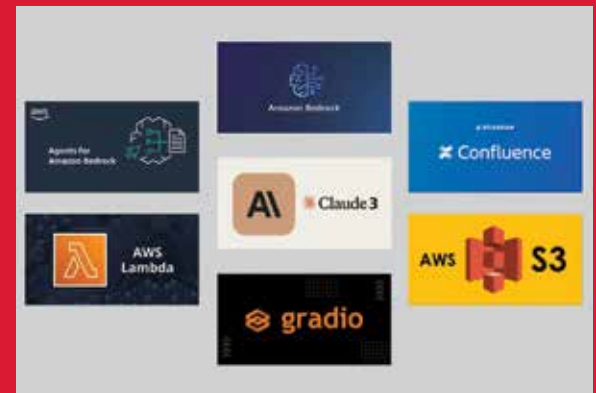
Portfolio of technologies powering the Claims genAI Copilot, featuring Amazon Bedrock, Claude 3, AWS Lambda, S3, Gradio, and Confluence.

TEAM

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Mia Siner

Amir Tarkian
Cole Walters

Deep insights into student performance point out underlying trends in student performance, exposing learning opportunities.

The student health dashboard provides an instant overview of high performing, middle of the pack, and struggling students.

The teaching oriented chatbot provides teachers with help regarding pedagogical and process related questions.

nelnet

Nelnet EduNova

Nelnet is a financial services company that focuses on student loan servicing, payment processing, and education-related products. To expand its impact in the education space, Nelnet wanted an AI-powered, data-driven tool to help teachers create better learning experiences.

The Design Studio team developed EduNova to meet this need by combining AI and data science to give educators valuable insights into student performance. The platform includes a general chatbot for teaching best practices, a data science-powered student dashboard, and a personalized chatbot that provides real-time updates on assignments and attendance. Designed to integrate with

Nelnet's existing student information system, EduNova makes it easy for teachers to access important student data in one place.

By incorporating generative AI into the classroom, EduNova introduces advanced technology to education, providing practical and valuable solutions. Teachers get instant access to insights that would normally take a lot of time and effort to uncover, enabling them to focus more on teaching and supporting their students. At the same time, Nelnet benefits by expanding its product offerings and staying at the forefront of education technology. EduNova is a step forward in making classrooms more efficient, data-driven, and student-focused.

TEAM
▶▶▶▶▶

Parker Allen
Zach Hammann
Riya Kannapareddy

Caiya Khammaly
Chase Kling

Funding Strategy Development Tool

Olsson is a nationally recognized engineering firm that helps communities develop infrastructure projects by securing funding through various financing methods, including federal and state grants, tax revenue, and innovative financial tools. However, identifying funding opportunities for city projects is a complex, manual process that requires extensive research and analysis by Olsson's Funding Strategy Team (FST). This time-intensive effort involves reviewing grant documents, assessing project eligibility, and aligning funding sources with client needs.

To streamline this process, the Design Studio team developed the Olsson Funding Strategy Dashboard, a tool designed to automate grant research and project matching. This system integrates a competitiveness algorithm that analyzes past funding successes and suggests the best grant opportunities for specific infrastructure projects. The dashboard provides a centralized, visual interface where the FST can efficiently manage city projects, assess funding matches, and make data-driven decisions with reduced manual effort.

By automating grant research and improving project matching, this solution will significantly enhance efficiency, cutting down on labor-intensive tasks and allowing Olsson's experts to focus on higher-value strategic planning. This tool will not only reduce administrative workload but also increase the speed and accuracy of funding recommendations, ultimately helping cities secure critical funding for infrastructure projects more effectively.

TEAM

Spencer Godina
Reed McHenry
Yashraj Purbey

Max Sievenpiper
Linh Truong
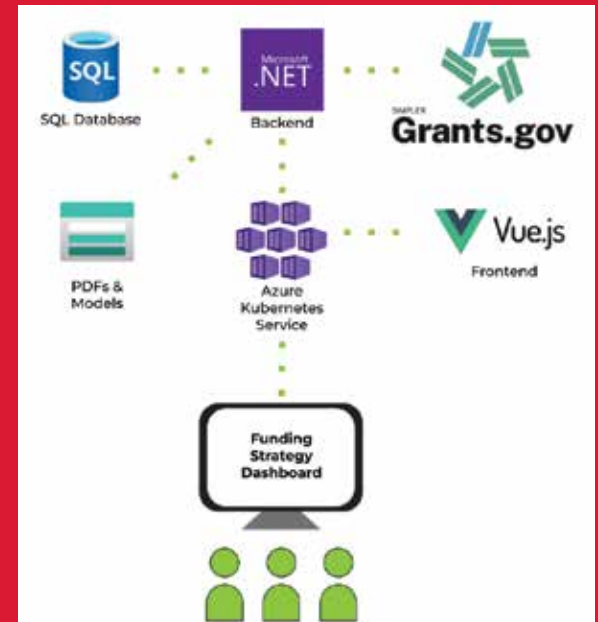
A high-level overview of our tech stack, focusing on its role in streamlining data retrieval and enabling smooth front-end and back-end interactions.

Bridging opportunities and projects—Connecting client project needs with funding opportunities through a streamlined, efficient dashboard.

Scoular users can view a shipment submitted from a warehouse, including details and documents, and then approve it.

Users can view, filter, and manage shipments.

Users can explore real-time inventory totals for each commodity in all warehouses.

SCOULAR®

3PL Insights

Scoular is a leading agribusiness company specializing in the buying, selling, storing, handling, and processing of grain, feed, food, and petfood ingredients. Scoular provides diverse supply chain solutions for end-users and leverages a network of owned, managed, and third-party facilities, coupled with truck, rail, barge, and container freight capabilities. Scoular plays a crucial role in efficiently and reliably facilitating solutions for their customers at every step in the agriculture supply chain.

In today's complex and constantly changing business environment, Scoular continues to drive operational excellence and leverage technology to enhance operational performance. However, Scoular is currently experiencing significant inventory and accounting inefficiencies within its third-party warehouse network. Each warehouse operates with its own processes and software, resulting in manual reconciliation efforts,

inconsistent procedures, increased risk of inventory discrepancies, and a lack of a centralized repository for reliable visibility. These inefficiencies have led to higher operational costs, financial inaccuracies, and reduced visibility into real-time inventory levels.

To address this challenge, the Design Studio team developed a centralized inventory and accounting web application to standardize data collection and tracking across Scoular's third-party warehouses. The application provides Scoular employees with a structured process to work with warehouses when tracking inbound, outbound, and other movements where inventory is received or shipped and required to be reconciled by Scoular. By ensuring a consistent and transparent workflow, the solution improves efficiency, accuracy, and visibility, reducing discrepancies and streamlining Scoular's inventory management and accounting processes.

TEAM

Parker Davids
Tyler Kerkman
Angela Le

John Post
Jay Selzer

![Signature Performance logo]

WorkflowXM

Signature Performance, Inc. is a healthcare administrative services company dedicated to reducing costs and improving efficiency for both payers and providers in the federal and commercial healthcare sectors. As the company expanded its offerings, it identified a key challenge in organizing and automating its business processes across multiple operational areas. Existing tools for claims processing, revenue cycle workflow management, and quality assurance are fragmented, relying on outdated technology or expensive third-party solutions that are difficult to customize and maintain. Additionally, non-technical users cannot configure workflows independently, leading to inefficiencies and high operational costs.

To address this challenge, the Design Studio team built WorkflowXM, a dynamic, low-code/no-code workflow engine that allows non-technical users to build and customize workflows without relying on developers. The solution features an intuitive drag-and-drop interface, customizable automations, and seamless integration with existing data sources. By consolidating workflow management into a single, adaptable platform, the solution enhances efficiency across business functions, from claims adjudication to quality assurance auditing.

WorkflowXM is expected bring significant business value by reducing reliance on third-party vendors, lowering costs, and increase workflow agility. This in-house solution would not only improve internal processes but also enhance Signature Performance's ability to adapt to new business opportunities, ensuring long-term sustainability and innovation in healthcare administration.
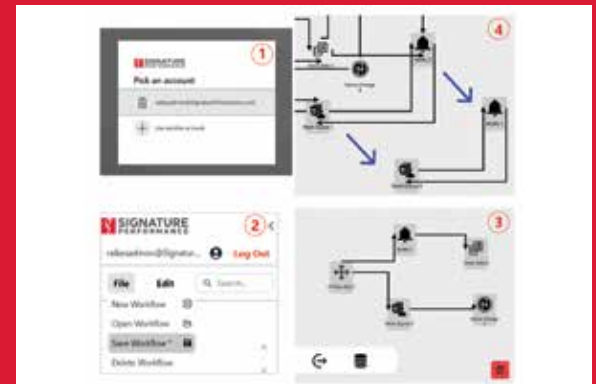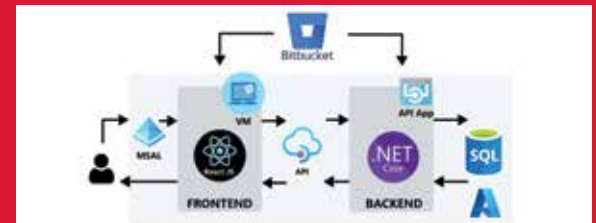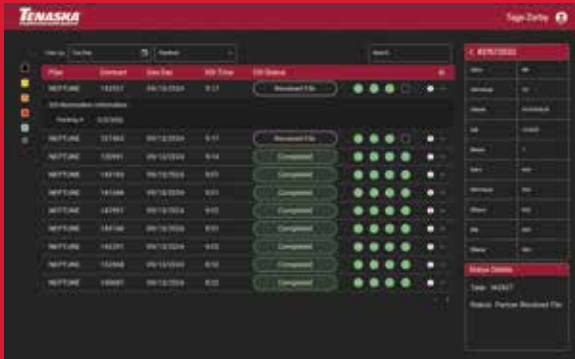

Users create their workflow using the designer canvas.

Features: 1 - MSAL Authentication, 2 - File dropdown, 3 - Multi-select and trash bin to delete, 4 - Copy & paste.

A high-level overview of the tech stack and how components interact.

TEAM ▷▷▷▷▶

Gowrav Ghatamaneni
Arnav Khandelwal
Cole Miller

Olwen Nguyen
Harley Paprocki

Home screen of the flow tracker app. Displays each natural gas transaction and corresponding details as a data table row.

Gantt chart component that displays the progression of a natural gas transaction through its various stages on a time axis.

Flow Tracker

Tenaska is a leading independent energy company specializing in power generation and energy marketing. The firm manages 10% of the natural gas consumed in the United States and Canada, equivalent to about 10.9 billion cubic feet of gas per day. Tenaska employees monitor these transactions much like traders on the stock exchange. Tenaska's existing monitoring tool lacks advanced details and live functionality, making it difficult for employees to quickly identify and troubleshoot errors in natural gas flow. These delays can cost the company valuable time and money, and often occur after-hours, during nights and weekends.

The Design Studio team reimagined Tenaska's internal monitoring system with a focus on efficiency, reducing troubleshooting delays, and enhancing the user experience. The team developed a web app that provides real-time data updates, allowing employees to monitor transactions as they happen. A Gantt chart-style progression view offers a clear visual representation of each transaction, helping users track the status of transactions through time more effectively. Additionally, built-in highlighting makes it easier to identify and resolve errors quickly.

Beyond functionality, the monitor app features a modern, clean interface that ensures an intuitive user experience. Equipped with this new system, Tenaska employees can make faster, more informed decisions, leading to greater operational efficiency and cost savings. This solution enhances Tenaska's ability to manage and optimize natural gas flow in a dynamic market.

TEAM
▶▶▶▶▶

Peyton Comer
Michael DeJournett
Carina Swanson

Vaughn Thompson
Tage Zerby

REFLECTIONS
FROM OUR STUDENTS

"The most impactful learning experience is learning to deal with factors outside of your control that can affect the outcome and delivery of the project. Design Studio is a good learning experience for these situations due to the long-term nature of the project (longer than summer internships), and it has been fulfilling to see how the project has advanced."

▼ ▼ ▼

— Radhika Damle —

"There are many ways to accomplish one type of goal. With my specific team project, it has been a learning curve with all of the software we are using, but there is almost always a new way to look at a problem or solution when tackling a project."

▼ ▼ ▼

— Alison Lenaghan —

"The most impactful learning experience from Design Studio is putting myself on a project learning how to collaborate, build, and communicate in a professional scope with a lot of support. I appreciate how Design Studio encourages students to embrace the uncertainty of starting a project without prior knowledge. It highlights the abundance of resources and support available to anyone who needs guidance along the way and the encouragement to experience something new. This has caused our team to really grow and adapt."

▼ ▼ ▼

— Angela Le —

"It has been a great experience being able to work on a fast-moving startup. I have learned a lot about development, teamwork, and prioritization over the past few months while still being in an environment where I am supported by my team and the Design Studio faculty."

▼ ▼ ▼

— Joseph Seibel —

"Working on a real project that has a real-world impact with my team was the most impactful learning experience. It helped me learn how to manage tasks, communicate better, and solve problems together. I gained skills like being flexible and adjusting when things don't go as planned. "
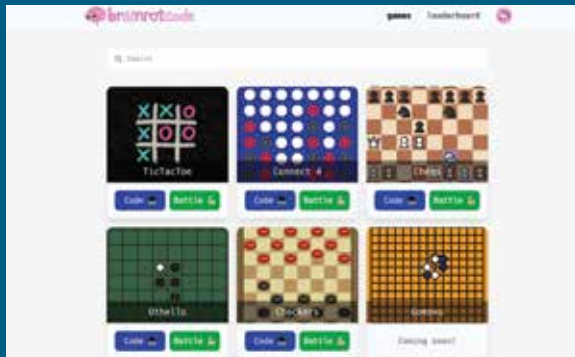
▼ ▼ ▼

— Yashraj Purbey —

"This semester has taught me how to effectively work in a complex team environment and have fun."

▼ ▼ ▼

— Peyton Comer —

The games page on brainrotcode shows all the games for which users can create bots.

The team traveled to Kansas City to host their first contest at Hack Midwest, the largest hackathon in the Midwest.

The editor page allows users to write code for their machine learning model and play directly against it.

▶ STARTUP STUDIO

As a student-led startup, brainrotcode provides a platform for developers to practice algorithms and machine learning on strategy games. The demand for machine learning specialists is skyrocketing as AI continues to advance and gain popularity. There is a massive shortage of developers to meet this demand, and the industry has not yet resolved the issue. Current online machine learning courses have very high dropout rates and little to no visualization tools.

The Design Studio team built brainrotcode.com to solve this problem by making learning about algorithms and machine learning fun and engaging. Designed for competition and learning, brainrotcode.com allows users to create the best algorithms or machine learning models to play popular strategy games. Users can visualize their algorithms'

decisions by playing directly against their own algorithms or by watching their algorithms face off against other users' algorithms in head-to-head battles. These visuals give users instant feedback to judge the quality of their machine learning algorithms by letting them identify issues with their strategies and fix their code accordingly. After sharpening their machine learning skills, users can compete for prizes in contests sponsored by companies looking to recruit talent and engage in educational outreach.

In only one year, the team built the entire website for safely running user-submitted code, visualizing games, and showcasing contest results and users' models. In that short time, brainrotcode.com has reached over 1,000 users, hosted multiple contests, and made over $4,000 in revenue.

TEAM
▶▶▶▶▶

Emmett Myers
Chaitra Pirisingula
Jack Rankin

Raimee Seal
Joseph Seibel

▶ STARTUP STUDIO

![CATTLE KETTLE logo]

Cattle Kettle (CK) is revolutionizing how ranchers manage water for their cattle by providing real-time, remote visibility into their water tanks. Ensuring livestock have consistent access to water is one of a rancher's most critical responsibilities—without it, herd health declines rapidly, putting entire operations at risk. Yet, checking water tanks requires long, costly trips—often to find no issue at all. Cattle Kettle eliminates this inefficiency by delivering real-time insights that help ranchers monitor their water levels from anywhere.

This year, the Design Studio team made significant strides in enhancing both CK technology and user experience. To create a seamless, customer-centric experience for ranchers, the team redesigned the CK Web platform and iterated on the CK Monitor. Accessibility was improved by ensuring the website functions effectively across various screen sizes, enabling users to monitor water levels from any device. Simplified navigation and improved engagement followed a complete redesign of the interface. In addition, the CK Monitor was reworked to be truly cattle-proof, with a rugged, durable design that withstands the curiosity and force of livestock. These advancements brought Cattle Kettle closer to delivering a reliable, user-friendly system that empowers ranchers with real-time water management at their fingertips.

By reducing unnecessary trips and preventing catastrophic water shortages, Cattle Kettle will save ranchers time, money, and stress. With each advancement, CK moved closer to transforming water tank management in the ranching industry—ensuring ranchers have the confidence and control they need to protect their herds and livelihoods.


The CK website adapts to screens of any size. This image displays key marketing webpages featured on a mobile phone.

CK provides ranchers real-time insights into each tank, allowing them to monitor water and temperature levels remotely for every device.

Brooke operates a robotic welder to precisely fuse metal components, assembling the hardware for the CK Monitor prototype.

TEAM
▷▷▷▶

Brooke Bode
Madelyn Craft
Clara Glock

Ava Hollingsworth
Sandesh Subedi
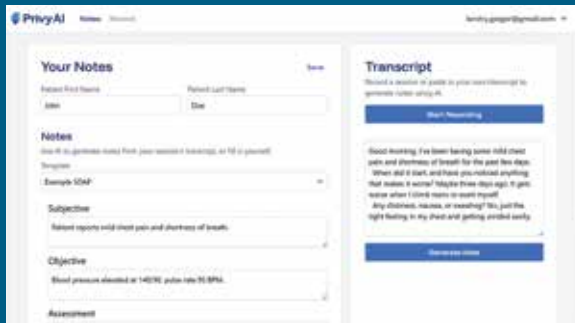
The Notes page allows clinicians to transcribe their patient interactions and generate daily notes instantly. Then, they can edit the fields and access their saved notes at any time.

The Templates Page is used to manage, create, and save custom templates with specific instructions for the AI note generation. These templates can be reused and tailored to the clinic's specific needs.

▶ STARTUP STUDIO

PrivyAI

PrivyAI is a student-led startup dedicated to returning time to physical therapists and chiropractors by automating daily administrative and notetaking processes. PrivyAI developed software that leverages speech-to-text and generative artificial intelligence (AI) to empower clinicians to spend more time doing what matters: building relationships and providing critical care to patients.

Initially, the PrivyAI Design Studio team set their sights on building their flagship web platform from the ground up and testing with real clinicians to iterate on customer feedback.

Within the application, users have the ability to transcribe their patient interactions. Then, they are prompted to review and approve the transcript before it is sent to the AI system for note generation. For added customizability, users can also define their own note templates with specific AI instructions to improve their notes. At any time, clinicians can search through their past notes and make any adjustments to ensure an accurate and accessible record of care provided.

PrivyAI launched their software as an MVP and conducted mock sessions with real clinicians. These interactions provided valuable feedback, guiding refinements to enhance the user experience. Based on this input, the team implemented adjustments to better align with its mission of saving clinicians time. By streamlining notetaking, PrivyAI has demonstrated its commitment to improving both efficiency and patient care, backed by real-world insights.

TEAM
▶▶▶▶▶

Bennett Anderson
Landry Geiger
Karla Sierra

Nathan Van Drie
Zachary Wallenburg

▶ STARTUP STUDIO

🐚 TeachFront

TeachFront is an education technology startup reimagining how students learn. Unlike traditional grade books, TeachFront is a learning management system (LMS) built with mastery-based assessment at its core.

Mastery grading is a growing pedagogy where teachers assess students on mastery levels rather than by point accumulation. Students receive a mastery level and actionable feedback for each learning objective within an assignment. They then have opportunities to revise and reassess, fostering growth mindsets.

Traditional grading is rooted in century-old standards, and the current LMS platforms on the market match this rigid, points-obsessed mindset. This forces instructors implementing mastery grading in their classrooms to use cumbersome and confusing workarounds. TeachFront addresses this problem, offering an end-to-end

mastery grading solution that integrates seamlessly into an instructor's workflow. TeachFront visualizes mastery in an intuitive way, allowing students to track their progress across various learning goals. The platform also remedies common pain points for mastery-based classrooms, like feedback and reassessment management. TeachFront empowers students and instructors to focus on progress, not perfection.

The Design Studio team focused on reaching feature parity with LMS competitors and breaking ground on integrations with other platforms. As TeachFront worked towards institutional compliance and contracts, FERPA requirements and accessibility were at the forefront of development as well. Accomplishing these milestones brought TeachFront closer to its vision of making mastery grading more accessible in the education space and promoting lifelong learning.
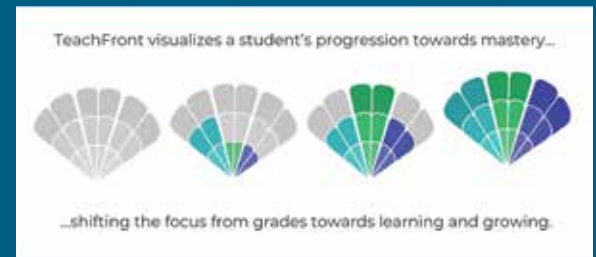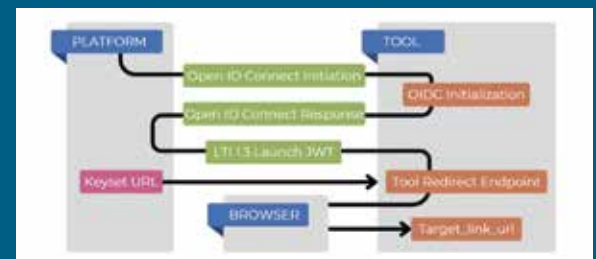

A full-featured LMS with mastery grading, progress tracking, announcements, and instructor tools—all in one platform.


TeachFront uses a unique shell design that fills in as students progress toward mastery.

Through LTI integration flow, TeachFront can securely communicate and interact with other platforms, like Canvas.

TEAM
▷▷▷▶

Sophia Heinrich
Lena Lankas
Peyton Peck

Nathan Ray
Kaden Semerad
Jonny Skelton
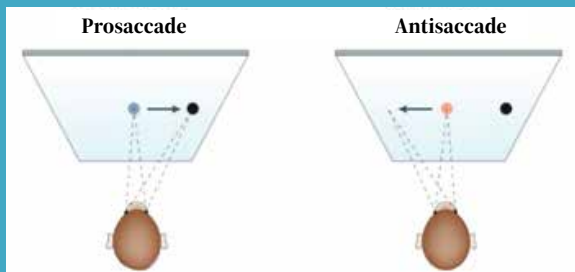
In the anti-saccade test participants must either look at (prosaccade) or away (antisaccade) from a cue (Munoz & Everling 2004).
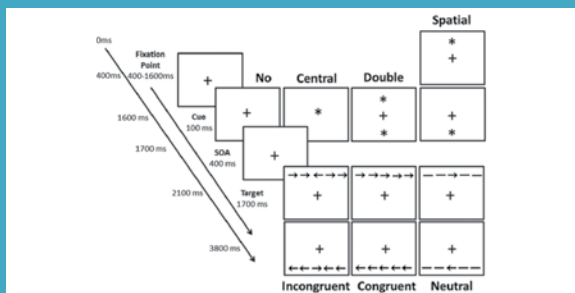
In the ANT participants report direction of central arrow amongst trials of different cues and flankers (Perez et al 2014).

A participant completes an antisaccade trial using eye tracker technology.

RESEARCH STUDIO

Examining the Impact of Video Game Experience on Attentional Allocation and Oculomotor Control

With the rise in popularity of video games over the last few decades, there has been a concurrent increase in the amount of research examining the psychological effects of video game experience. While Social and Developmental Psychologists initially demonstrated negative aspects, within the realm of Cognitive Psychology, there is considerable evidence that video game experience improves several basic cognitive functions. Numerous studies have shown that video game players (VGP's) often exhibit faster reaction times in the absence of any change in accuracy, relative to non-video game players (NVGP's).

This research aims to replicate and extend examinations of how video game experience impacts basic cognition across two experiments. Experiment 1 uses both the attentional network task (ANT)—a commonly used measure of three different types of attention—and the anti-saccade task to determine the impact of video game playing experience on cognitive control. Previous research has exhibited superior performance by VGPs on these tasks, but no study has examined the anti-saccade task as it relates to the gap effect in VGPs. If VGPs also exhibit a moderate gap effect, it would suggest that the positive effects of video games extend from the behavioral to the physiological. Experiment 2 extends the anti-saccade task to include irrelevant emotional faces to analyze emotional processing. There are considerable individual differences in how emotion processing impacts subsequent cognitive performance but to date the effects of video game play on emotion perception have not been well studied.

TEM

Jake Rance
Dr. Mike Dodd, Professor,
Department of Psychology

RESEARCH STUDIO

ARG-V

Software verification is a diverse and growing field, with numerous tools present in both corporate and research settings. Benchmarking and comparing these tools is an important step in the development process, and conferences like the Competition on Software Verification (SV-COMP) seek to provide a platform for testing verifiers in a wide variety of categories, from memory safety to reachability. Unfortunately, the development of tests for these competitions is a long and arduous task, resulting in a lower volume of available benchmarks and a less-than-comprehensive evaluation of software verifiers.

ARG-V seeks to streamline and automate the production of benchmarks for competitions such as SV-COMP, building off of a previous project called PAClab that allowed us to convert Java code into a syntax tree structure. We are then able to identify key features in this tree and filter for code with specified characteristics, such as number of branching conditions, and make in-place changes to fit our business needs. The end result is a tool that can find and transform existing Java files with specified characteristics from the user, such as a certain number of branching conditions, and adapt it into a benchmark that can be run on software verification tools. The original PAClab focused on one software verifier and was limited in scope for what data types and structures it can handle; ARG-V seeks to generalize the tool to all verifiers competing at SV-COMP and expand the complexity of Java code it can handle, namely in transforming floating point values and arrays. This will help to increase the scope of testing for software verifiers, enabling the production of more robust, less error-prone tools.
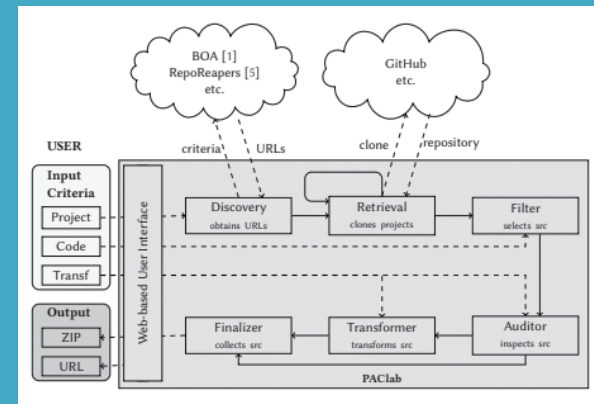

A flow chart of ARG-V for selecting and transforming files, as well as how it compares to its predecessor, PAClab.

A floating point value is converted for use in a verification technique called symbolic execution.

The complete workflow of PAClab (now known as ARG-V)

TEAM

Charles Moloney
Dr. Robert Dyer, Assistant Professor,
UNL School of Computing

STUDENT MAJORS

Accounting	1	Emerging Media Arts	1
Actuarial Science	8	Marketing	1
Computer Science	65	Mathematics	2
Data Science	5	Mechanical Engineering	3
Economics	2	Software Engineering	21
Electrical Engineering	1	Supply Chain Management	1

INDUSTRIES REPRESENTED

Agriculture	Food
Construction	Healthcare Services
Education	Insurance
Energy	Nonprofit
Engineering	Software
Fiber Broadband	Retail
Financial Services	Sports

AT A GLANCE

PRIMARY BUSINESS VALUE

	Efficiency	Growth	Customer Satisfaction	Agility	Ground Breaking
Business Analytics	▶ Allo ▶ Conagra Brands		▶ Allstate		
Digital Operations	▶ DMSi ▶ Scoular			▶ Buildertrend	▶ Olsson
User Experience	▶ Farm Credit Services of America	▶ ECHO Collective ▶ Kiewit	▶ Tenaska		▶ brainrotcode ▶ TeachFront
Integrated Systems				▶ Signature Performance	▶ Cattle Kettle
Emerging Technologies	▶ Nelnet ▶ Privy AI	▶ Hudl	▶ Buckle ▶ Mutual of Omaha	▶ HDR	

PRIMARY TECHNICAL DOMAIN
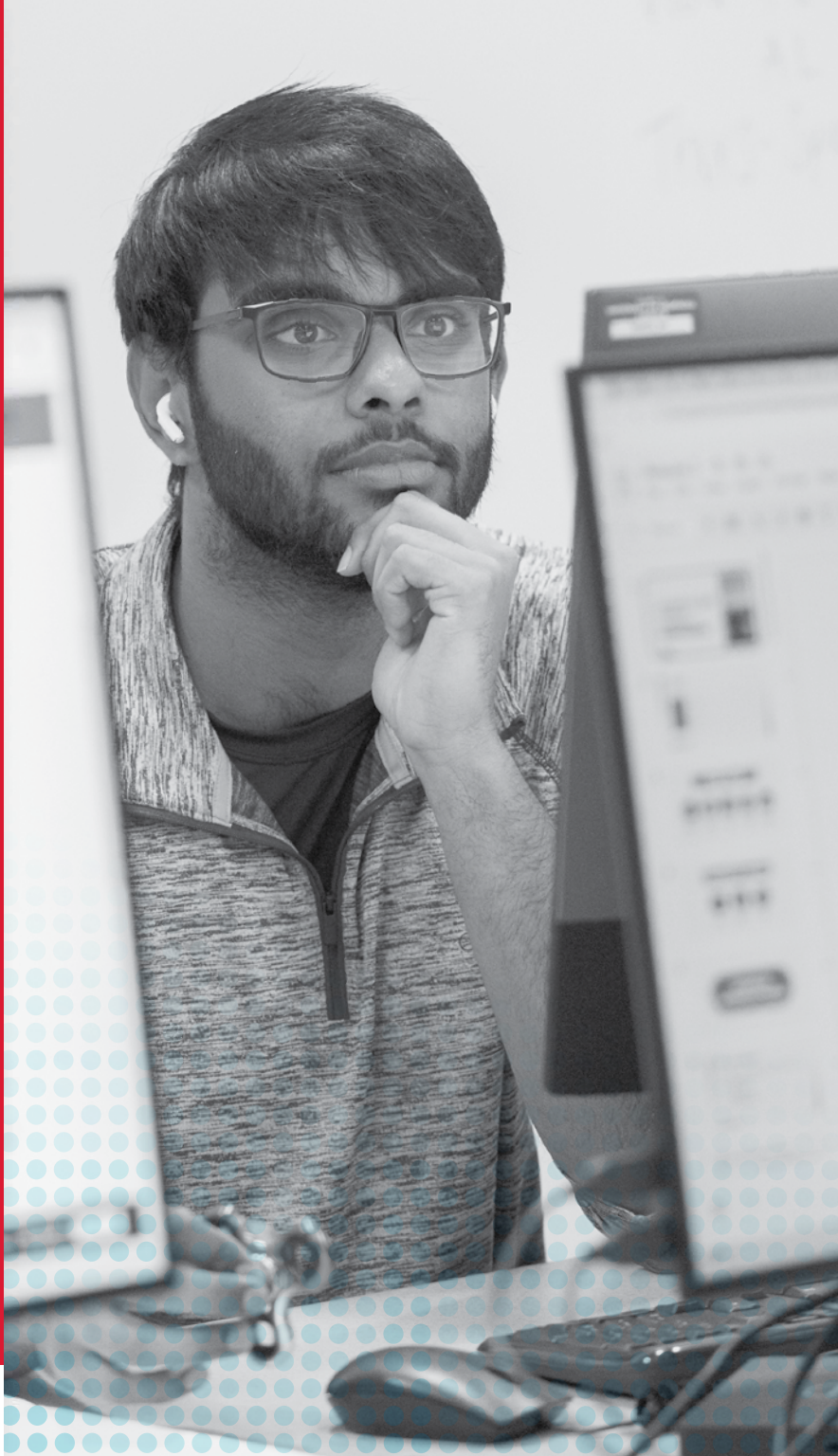
WHY
Sponsor a Project?

▼   ▼   ▼

In addition to growing the business and technology workforce in Nebraska, our sponsors bring value back to their companies through:

▶ **THE OUTPUT OF THE PROJECT:**
- Cost savings
- Efficiency improvements
- Proofs-of-concept
- Acquired intellectual property

▶ **INNOVATIVE WAYS OF THINKING:**
- Students bring experience with emerging technologies
- Think outside the realm of how your industry or organization "has always done it"

▶ **IDEAL SETTING FOR EXPERIMENTATION:**
- Good fit for new and emerging managers to lead
- Low-risk way to try creative solutions

WHEN
are Projects Selected?

▼ ▼ ▼

APRIL/MAY

Many of our partners are so passionate about the program, they come back year after year. As soon as showcase concludes, we begin finalizing projects for the next year and identifying opportunities for new sponsors. Spring is the perfect time to reach out to Design Studio staff to inquire about a project.

JUNE/JULY

This is when projects are confirmed and selected sponsors finalize their statements of work.

AUGUST

Sponsors and coaches gather for a summit, and projects are each assigned a student product manager and a development manager. Once the fall semester begins, sponsors participate in project rollout, a career-fair style event where students learn about the projects to discern the best fit for them personally.

THE DESIGN STUDIO TEAM

▶ **ROB NICKOLAUS**
Director of Design Studio

Rob has been involved in software and technology teams for 30 years working with startups, large companies, non-profits, and volunteer organizations. His roles ranged from individual contributor to technical leader to strategist.

▶ **RACHEL MICHAELA METTENBRINK**
Design Studio Architecture and Engineering Lead

A budding academic with over a decade of experience in software and IT, Rachel uses her expertise to guide students through the technical challenges they face in Design Studio.

▶ **NANCY HEYNE**
Design Studio Program Lead

With 25 years in public relations and marketing, Nancy partners with industry leaders to identify impactful projects and coach teams. She highlights the power of communication in team management and achieving meaningful results.

▶ **DR. STEVE COOPER**
Executive Director of the Raikes School

Previously at Stanford University, Steve believes in learning by doing and that changing the world in the 21st century starts with understanding business and computer science.

▶ **JAKE KOPERSKI**
Design Studio Program Lead

Previously a software engineer and startup entrepreneur, Jake is now creating opportunities for student entrepreneurs and mentoring teams on best practices.

▶ **DR. JUSTIN FIRESTONE**
Assistant Professor of Practice, Academic Lead

Focused on the intersection of technology, ethics, and law, Justin teaches software engineering and business law courses for the Raikes School and cyber law at Nebraska law.

▶ **DR. ROBERT MACKALSKI**
Associate Professor of Practice,
Academic Lead

Software entrepreneur turned academic;
Bob teaches marketing courses at the
Raikes School.

▶ **DR. SETH POLSLEY**
Assistant Professor of Practice,
Academic Lead

Data science professor at the
Raikes School, Seth promotes
the integration of artificial intelligence
into practical applications.

▶ **DR. STEPHANIE VALENTINE**
Associate Professor of Practice,
Academic Lead

Teaching computer science courses at the
Raikes School, Stephanie works with Design
Studio teams on novel interaction design and
applied machine learning.

SPECIAL THANKS

Startup Studio Advisors

Startup Studio advisors participate in release meetings and provide feedback to the teams.

▶ **brainrotcode:** Hari Kishan Prakash, Machine Learning Researcher, Roswell Biotechnologies
▶ **Cattle Kettle:** Josh DeMers, co-founder at DARO, and
Jessica Rudolph, Ecosystem Manager at The Combine
▶ **Privy AI:** Travis Arment, Sr. Director of Project Management & Customer Success at Morpheus.Network
▶ **TeachFront:** Tami Williams, Associate Professor & Department Chair Educational Leadership at
University of Nebraska at Omaha

Design Studio Coaches

Coaches are industry experts and volunteers who meet with their teams weekly to provide mentorship and guidance on best practices.

- Bill Anderson
- Todd Bryant
- Sean Carroll
- Brandon Collins
- Nick Ebert
- Andy Giese

- Nick Hershberger
- Rees Klintworth
- Marek Kracl
- Santi Murtagh
- Brendan Owens
- John Roby

- Jacob Sanchez
- Jonathan Scholtes
- Ashlyn Slawnyk
- Trevor Slawnyk
- Sherry Weber
- Drew Wigodsky

- Matt Will
- Brian Zimmer
- Steve Zinn

Guest Speakers

- Bill Anderson
- Mike Buck
- Joy Eakin
- Shakib Hikmat

- Alli Koester
- Skyler Meints
- Joseph Nieto
- Damien Niyonshuti

- Christian Peters
- Cameron Popp
- Chase Prochnow
- Eric Reichwaldt

- Anne Ruskamp
- Jessica Smith
- Danielle Thompson
- Dr. Laura Madeline Wiseman

Special Thanks

- Award Committee
- Becky Barnard
- Lauren Becwar
- Mike Cassling
- Charlie Cuddy
- Teresa Friesen

- Pat Kerrigan
- Julie Perez
- Stephanie Severin
- Mailani Veney
- Ben Williamson

JOIN US IN CREATING ▶▶▶▶▶ WORLD-CLASS INNOVATORS!

▶ **To learn more about supporting the Jeffrey S. Raikes School of Computer Science and Management, contact Abby Dieter Shoemaker, Director of Development**
Abby.dietershoemaker@nufoundation.org | 402-504-3329

▶ **To learn more about sponsoring a project, volunteering, or joining Design Studio as a student, contact Rob Nickolaus, Director of Design Studio**
designstudio@unl.edu

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> **We understand that when we work together, we build better solutions.**
>
> — Rob Nickolaus, Director of Design Studio —

raikes.unl.edu