Jake Stetson

Professional Profile: https://jakestets5.github.io/

Education

Kansas State University, Manhattan, KS **May 2024**
Bachelor of Science in Computer Science, Minor in Mathematics **GPA: 3.69**

Skills

Languages – C#, Python, JavaScript, Kotlin, SQL, HTML5, X++
AI – Tensorflow, PyTorch, Large Language Models, Vision models (classification, segmentation, and detection), Roboflow, Azure
Environments – Visual Studio Code, Google Colab, GitHub, D365 Finance and Operations, Microsoft Azure

Contact

Jakestets5@outlook.com
720-695-7111
Broomfield, CO 80020
https://www.linkedin.com/in/jacob-stetson5/

Work Experience

App Developer - Swine Fever Project, Kansas State University **June 2024 – November 2024**

- Developed an Android app in **Kotlin** and a web application using **Node.js**, **React**, and **JavaScript** to automate swine fever test classification and streamline the reporting processes
- Leveraged machine learning services in **Microsoft Azure** to implement a highly accurate, cloud-based model that classifies swine fever tests as positive or negative
- Developed a **RESTful API** using **Node.js** to handle user authentication, data retrieval/storage, and transactions between the machine learning model and the web app, ensuring secure and efficient communication
- Cross-functionally collaborated with the agriculture and computer science departments to align the project goals with technical solutions

Managed Application Services Intern, RSM **June 2023 – August 2023**

- Executed a multi-step project involving manual data extraction from Excel and PDF files, database storage, development of a Power App, and creation of an **X++** program to scrape a client's D365 environment. This project compiled RSM products used by clients in a centralized location
- Collaborated with a team to create a product and simulate its lifecycle in **D365 Finance and Operations** within a mock environment, to gain a deeper understanding of the software
- Conducted an in-depth analysis of Hershey, a client of RSM, to discover which RSM products and resources they could be marketed
- Worked with a wide range of stakeholders, from interns to C-level executives, gaining valuable insights into business strategy and developing a commitment to continuous learning and active engagement

Student-Athlete Tutor, Kansas State University **February 2023 – December 2023**

- Tutored 30+ student athletes at Kansas State University in Calculus I-III, Python, Algebra, and Discreet Math
- Communicated technical concepts to beginners, enhancing personal understanding and teaching skills
- Provided instruction in both one-on-one and group settings, enabling the application of a broader range of teaching skills

Projects

Senior Capstone Project **January 2024 – May 2024**

- Designed and developed a heat stress monitoring app using **Kotlin** to assess and mitigate heat-related risks for cattle
- Integrated Open Weather Map's API to enable real-time data collection and provide accurate heat stress risk assessments
- Incorporated location-based weather services via the Google Places API to offer localized recommendations and heat indices
- Developed a user-friendly interface with intuitive navigation and proactive alerts for heat stress management
- Collaborated with heat-stress researchers to validate app functionality and ensure accurate computations

Fusarium Detection Project **January 2024 – May 2024**

- Fine-tuned object detection machine learning models to identify Fusarium, a fungal infection, in wheat
- Compared machine learning models to determine the best fit for the project goals through analyzing confusion matrices, architectures, and detection methods (segmentation, classification, bounding boxes, etc.)
- Collaborated with researchers to write an academic report using **Overleaf** to summarize and explain the project