

Jimmy German

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EDUCATION

The University of Cincinnati | Cincinnati, OH

GPA: 3.42/4.0

Bachelor of Science | Computer Science | May 2025

Relevant Coursework: Data Structures, Design and Analysis of Algorithms, Intro to Artificial Intelligence, Intro to Computer Systems, Intro to Cloud Computing, Intro to Machine Learning, Software Engineering

Awards & Honors: Dean's List

TECHNICAL PROJECTS

Credit Card Redemption Calculator | Personal Project (In-Progress)

Oct 2024 - Dec 2024

- Implemented a flight search engine with a multi-factor filtering
- Designed a React.js frontend for seamless user navigation and dynamic redemption flows
- Built FastAPI endpoints to fetch and normalize flight data across multiple airline sources in real time
- Developed a MySQL database to securely store users' flight histories with encrypted data

Neural Network Builder | Senior Design Team Project

Nov 2024 - Apr 2025

- Engineered a drag-and-drop, node-based editor in Svelte & SvelteFlow for visual neural network design and training
- Integrated frontend with a Flask/PyTorch backend via REST APIs real-time model training and inference
- Standardized data flow between nodes, normalizing network definitions across multiple layers and architectures
- Developed a modular Svelte component library to standardize network-node UI elements and improve clarity
- Designed frontend interfaces using advanced Figma techniques to optimize UX and workflows
- Presented the full end-to-end workflow to stakeholders, professors, and judges, demonstrating technical functionality

Machine Learning and Artificial Intelligence

Mar 2024 - May 2024

- Built models to classify American animal species from datasets using supervised learning techniques
- Utilized Convolutional Neural Networks to create high-performing models with strong evaluation metrics
- Created models to predict the geographical origin of music based on audio track features
- Explored and applied activation functions, optimization methods, and classification algorithms to improve models

TECHNICAL EXPERIENCE

Cyrkl | Prague, Czechia

Jan 2024 - May 2024

Challenge Project

- Collaborated with Cyrkl to develop a Waste Emissions Calculator used to estimate emissions for 50+ industrial waste types
- Conducted data analysis and deep research to find carbon emissions for different industrial waste materials
- Presented data, frontend calculator to stakeholders and the company for future use

Siemens | Milford, OH

Jan 2022 - Dec 2022

Backend Software Engineer | TeamCenter Integration for NX (TCIN)

- Ensured Siemens NX was running in tandem with the database (Teamcenter) by managing customer-reported bugs
- Gained experience navigating and debugging file directories containing over 50,000+ C/C++ source files
- Co-led UI development for the NX Launcher project using Windows Presentation Foundation
- Utilized Agile Development and designed UML diagrams for the NX Launcher project

SKILLS & CERTIFICATIONS

Programming Languages: C • C++ • Java • JavaScript • TypeScript • Python • HTML • CSS • SQL

Frameworks & Tools: React • Svelte • Flask • FastAPI • PyTorch • MySQL • Git • Bash • Node.js • Azure • Figma

Machine Learning: CNNs • RNNs • Transformers • Supervised & Unsupervised learning • Pandas

Certifications: FreeCodeCamp Responsive Web Design • JavaScript Algorithms and Data Structures