Zoe Van Der Vlugt

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EDUCATION

Southwestern University — Georgetown, TX
Bachelor's of Science in Computer Science — Aug 2022 - May 2025
Relevant Coursework: Computer Organization, Theory of Computation, Algorithms, **Ruter & Ruter-Herman Brown Scholar**
Discrete Mathematics, Linear Algebra, Artificial Intelligence, Computer Systems, **Dean's List**
Programming Languages, Software Engineering **GPA: 3.75**

SKILLS

Languages: Python, Java, C++, C, Common Lisp (Proficient); JavaScript, Prolog, R, x86 Assembly (Intermediate)
Front End / Back End: HTML/CSS, Vue, SQL/MySQL, LangChain
Tools: Linux, Git/GitHub, VS Code, Cloudflare Workers AI, Django, Excel

PROJECTS

Automated Inventory Projection in a Small-Scale Vineyard — Georgetown, TX
Software Engineering Capstone — January 2025 - Present
- Developed a MySQL database to centralize inventory tracking of wine by type, year, and blend, and implemented in Django.
- Optimized data integration in Excel, Power Query, and Power Automate saving 5 hours monthly for the vineyard staff.
- Designed a web app interface in HTML/Vue.js integrated with the Django backend, ensuring reliable MySQL database interactions.

AI Resume Builder — Austin, TX
Toolhouse + Cloudflare AI Hackathon — November 2024
- Produced a serverless application through Cloudflare Workers AI and Python that tailors resumes based on queries to Llama 2.
- Implemented file handling with PyPDF2 in a document upload system, supporting PDF/TXT formats with error handling.

Data Processing Automation for Pharmacy Refusals Dataset — Princeton, NJ
Datathon4Justice with QSIDE Institute — October 2024
- Engineered a document classification pipeline that processes RTF files using LangChain and OpenAI's LLMs and a given prompt.
- Structured classification responses using Pydantic models, ensuring data integrity for Pandas DataFrames visualizations.

LEADERSHIP & INVOLVEMENT

SOAR Summit Professional Development Conference Participant & Mentor — Georgetown, TX
College and Career Center, Southwestern University — January 2024 - January 2025
- Mentored a cohort of 6 members, guiding leadership development through self-reflection activities.
- Coordinated communication of cohort members by providing a platform on GroupMe, iMessage, and email.
- Led an exercise in goal-setting for the 40+ attendees by presenting an allegory to if-then statements and examples.

Finance Operations Vice President — Georgetown, TX
Alpha Xi Delta Fraternity — September 2023 - January 2025
- Managed a $20,000/semester budget and billing for 48 members.
- Collaborated weekly with the chapter executive board, and routinely with chapter and national advisors about financial goals.
- Established payment plans for 10 active members, and 8 alumni to promote financial literacy across the chapter.

Calculus 2 Teaching Assistant — Georgetown, TX
Math & Computer Science Department, Southwestern University — January 2024 - May 2024
- Conducted biweekly office hours for 30+ students to answer questions and provide homework assistance.
- Researched and organized review sheets for weekly sessions to supplement students' coursework.