Piper Jeffries

Computer Science - Undergraduate Student

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SUMMARY

Computer Science senior with experience designing and building full-stack web applications, including a solo project integrating AI via API. Conducted research in quantum computing and AI-driven education tools for beginner programmers. Skilled in Python, JavaScript, and AI frameworks, seeking a full-time software engineering position.

EDUCATION

Bachelor of Science in Computer Science
Missouri University of Science and Technology

📅 August 2022 – December 2025   📍 Rolla, MO

· Computer Engineering Minor
· Mathematics Minor
· **Major GPA: 3.93**
· GPA: 3.75 | Dean's List

High School
North Callaway High School

📅 August 2018 – May 2022   📍 Kingdom City, MO

· Ranked 3 in graduating class of 2022

EXPERIENCE

Student Assistant IT
Desktop Support - Information Technology, Missouri S&T

📅 January 22 – Present   📍 Rolla, MO

· Resolve on average of 10 technical support tickets weekly for faculty and staff by providing both onsite and remote hardware and software support.
· Configure and deploy new workstations and laptops.
· Perform regular maintenance including Windows updates, antivirus scans, and backup verification across campus computers.

Undergrad Research Assistant
Computer Science Department

📅 May 2025 - August 2025   📍 Missouri S&T

· Independently designed and implemented a full-stack web app, **WriteEZ**, using Java and Python, with a FastAPI backend.
· Integrated local AI models for speech-to-text and document formatting via Ollama's WebLLM and Whisper, enabling full offline functionality and privacy.
· Designed and implemented an easy-to-use UI with accessibility-focused features.

Barn Hand
Brenda Benner Stables

📅 October 2022 – August 2025   📍 Columbia, MO

· Maintained horse care and barn facilites through physically demanding daily work, ensuring safety and wellbeing of animals.
· Managed time-sensitive tasks and coordianted with staff to ensure smooth operations for trainer.
· Developed strong work ethic and responsibility through consistent early-morning shifts.

TECHNICAL SKILLS

· **Programming:** Python, JavaScript, C++, SQL, R
· **Web Development:** Flask, FastAPI, REST APIs, HTML/CSS
· **AI/ML:** Speech-to-Text, API integration
· **Tools & Systems:** Git, GitHub, Linux, Windows, macOS, VirtualBox

PROJECTS

AI Coding Assistant:
· Collaborated on developing an AI-powered chat tool for beginner programmers.
· Focused on refining prompts and training workflows to ensure refactored code outputs were accurate, reliable, and educational for novice users.
· Wrote scripts to run a set of test data on an AI chat tool, reviewed refactored code to identify errors and improve the chat tool's accuracy.

Quantum Computing:
· Researched the Discrete Bulk Reconstruction Problem (DBRP), an algorithm for reconstructing bulk geometry encoding quantum information, with applications to fundamental physics.
· Reviewed academic literature and collaborated with peers to develop hypotheses and explore potential extensions of the DBRP framework.

RELEVANT COURSEWORK

· Algorithms, Data Structures, Operating Systems
· Communication Networks, Computer Security
· Quantum Computing
· Capstone I & II
· Data Science, Regression Analysis

ACTIVITIES

· **Chief Administrative Officer** – Motorcycle Design Team
· **Public Relations** – South Winds

ACHIEVEMENTS

· Dean's List
· Top 5 Graduating Class of 2022