

Piper Jeffries

Computer Science - Undergraduate Student

@piperjeffries@icloud.com pjeff1465.github.io piper-jeffries (573) 476-7932 pjeff1465

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
- Overall 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 facilities through physically demanding daily work, ensuring safety and wellbeing of animals.
- Managed time-sensitive tasks and coordinated 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:** Excel, 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