

Aashrith Reddy Potu

Tempe, AZ | 602-358-3621 | aashrithreddypotu0609@gmail.com | [Aashrith Reddy Potu](#)

EDUCATION

Arizona State University — Tempe, Arizona

August 2023 - December 2026

Bachelor of Science in Computer Science | GPA: 4.00/4.00

TECHNICAL SKILLS

Programming Languages: Java, Python, C, C++, Assembly (x86 Intel), MATLAB, HTML, CSS, SQL, JavaScript, TypeScript.

Frameworks & Libraries: JavaFX, React.js, Pandas, NumPy, Plotly, TensorFlow, Pytorch, Sklearn, Node.js, Tailwind.

Databases & Tools: H2, Oracle, MySQL, Git, GitHub, Jupyter Notebook, Tableau Cloud, Jira, Figma, Canva.

Systems & Virtualization: Linux, Kali Linux, VirtualBox, VMware Fusion, Virtual Machines, Microsoft Office Suite.

EXPERIENCE

Academic Support Network | **Tutor**

Jan 2025 – Present

- Mentored 150+ peers in Java, C, C++, and Python through hands-on workshops, improving coding assessments and strengthening collaborative debugging skills.
- Explained complex STEM concepts across mathematics and engineering courses with tailored examples and interactive demonstrations, boosting student comprehension and critical thinking in problem-solving scenarios.
- Increased workshop participation through effective peer mentoring, technical instruction, and collaborative learning environment fostering academic excellence.

Global Career Accelerator | **Data Analyst Trainee**

Aug 2024 – Dec 2024

- Analyzed 10M+ global web sessions using SQL queries and statistical methods to uncover user behavior trends, driving 15% increase in traffic through data-informed marketing decisions and strategic recommendations.
- Built interactive Tableau dashboards connected to real-time SQL pipelines for renewable energy data visualization, cutting team decision time by 40% and enabling faster insights for infrastructure projects.
- Leveraged Python, Pandas, and Jupyter Notebook to parse and visualize complex datasets from Grammy traffic analysis, improving strategy accuracy by 20% in traffic forecasting and infrastructure planning projects.

Inspirit AI | **AI Fellow**

May 2022 – Jul 2022

- Managed task distribution across 6-member team for exoplanet identification machine learning project, improving workflow efficiency and coordination using Python, TensorFlow, and collaborative development practices.
- Cleaned and preprocessed 10,000+ stellar energy data points using data wrangling techniques and trained AI models to predict exoplanet distances with statistical insights for astronomical research applications.
- Built and evaluated 4 machine learning models including Multi-Layer Perceptron, achieving 91.97% training and 90.81% testing accuracy for exoplanet detection using scikit-learn and deep learning frameworks.

PROJECTS

Predictive Crowd Flow Analytics | *Scottsdale Fire Department (EPICS at ASU)*

Aug 2025 – Present

- Collaborated with 7-member team developing AI crowd prevention system with Scottsdale Fire Department using ML and cybersecurity protocols.
- Preprocessed 15,000+ data points with Pandas/NumPy, achieving 85% accuracy in crowd density classification using Scikit-learn models.
- Built PyTorch computer vision pipeline for real-time people counting, reducing manual monitoring by 60% with alerts.

Programming Language Interpreter | *Systems Programming*

Aug 2025 – Present

- Built tree-walking interpreter using Java with lexical analysis, recursive descent parsing, and AST evaluation.
- Implemented advanced features including lexical scoping, closures, OOP with inheritance, and error handling.
- Developed parser/scanner components with design patterns, token generation, and runtime environment management.

Student Q&A Platform | *Full-Stack Development*

Jan 2025 – Apr 2025

- Worked with 6-member team through SDLC of JavaFX platform, delivering all features across 4 project phases.
- Designed H2 SQL database with backup functionality, optimizing table structure and search performance.
- Developed CRUD operations, role-based profiles, and rating systems using object-oriented programming principles.