

Gaurav Gajavelli

U.S. Citizen | gajavegs@rose-hulman.edu | (786) 747-6768 | linkedin.com/in/gajavegs | github.com/gauravgajavelli

Education and Certifications

Rose-Hulman Institute of Technology, Terre Haute, Indiana

May 2026

Bachelor of Science, Computer Science | Minor in Artificial Intelligence

GPA: 3.98/4.0

AWS Certified Solutions Architect – Associate (SAA), Amazon Web Services – September 2024

Technical Skills

Languages: Java, C#, JavaScript, Python, SQL, Ruby, C++, HTML, CSS

Frameworks/Tools: Spring Boot, Node.js, .NET, React, Vue, Ruby on Rails, AWS, Docker, Kubernetes

Experience

Caterpillar Inc.

June – September 2025

Backend Development Intern

Peoria, Illinois

- Maintained **HCL Commerce (Java)** catalog services for 20K+ daily visitors on parts.cat.com, staging content through QA environments for safer, reversible releases
- Extended **Spring Boot/Apigee** API, gated by feature flags, to deliver regionalized visibility across ~1.4M parts
- Developed shell scripts to enable custom parts loads across 100+ dealerships and cut storage costs ~\$2K/month by preventing daily indexing of temporary data in **Apache Solr**

SAP America

June – August 2024

Software Engineering Intern

Indianapolis, Indiana

- Revamped **Vue** frontend and **Node.js** microservices, simplifying setup for 1B+ messages sent by brands including Disney and Nike
- Designed test automation for partner APIs using **GitHub Actions** to minimize overhead, saving 20+ hours/quarter
- Expanded unit/regression test coverage using **Mocha**, **Jest** mocks, and **Cypress** E2E in full-stack refactor

London Computer Systems

February – May 2024

Software Development Intern

Cincinnati, Ohio

- Developed **C#/.NET** Rent Manager Web API, resolving feature requests and performing same-day hotfixes for customers and third-party developers
- Optimized **MySQL** queries for SMS messaging and electronic payment, resulting in 20% faster response times across 100,000+ API requests yearly
- Researched regulatory requirements and updated NACHA file storage, securing customer financial data

Indigo BioAutomation

May – August 2023

Software Engineering Intern

Carmel, Indiana

- Implemented **Ruby on Rails** and **C++** data calibration algorithm for Ascent flagship web app/medical device
- Analyzed 2M+ calibration curves using **MySQL**, **R**, and **Python**, verifying 20% failure reduction

Projects and Research

Artificial Intelligence Research Project | *Python, Pandas, MATLAB* | GitHub: gauravgajavelli/GCN4Parkinsons

Research mentored by Dr. Julian Shun @ MIT CSAIL Lab

- Created a neural network classifier for MRI scans, matching key disease markers and identifying Parkinson's cases with 91.57% accuracy
- 1st Place National Science Teaching Association Momentum Research Grant (\$2,000)

Personalized Nutrition Planner | *TypeScript, Node.js, React, AWS* | GitHub: gauravgajavelli/Freshman15

- Built a meal-tracking web scraping app to assist students with dietary preferences
- Leveraged combinatorial algorithm to generate millions of potential meals meeting USDA health standards

Activities

- Teaching Assistant – CSSE 132: Introduction to Systems Programming
- Teaching Assistant – MA 113: Calculus III
- Mentor – CSSE Freshman Mentoring Program

March – May 2023

August 2022 – February 2023

August 2023 – Present