Vishwesh Pillai

623-703-2501 • vishwesh103@gmail.com • linkedin.com/in/vishwesh-pillai • github.com/theviz343

EDUCATION

Master of Science in Computer Science — Expected May 2024
Arizona State University, Tempe, AZ — 4.0/4.0 GPA
Coursework: Foundations of Algorithms, Artificial Intelligence, Data Mining, Cloud Computing

BTech in Electronics and Communication Engineering — May 2022
Visvesvaraya National Institute of Technology, Nagpur, India — 8.61/10 GPA
Coursework: Computer Networks, Deep Learning, Object-oriented programming

TECHNICAL SKILLS

Programming Languages:	Python, Java, JavaScript, MySQL, HTML, CSS
Frameworks:	Django, Spring, Flask, React.js, Pytest, JUnit, NumPy, Pandas, SciKit, Tensorflow, Keras
Tools:	Git, Maven, AWS, Jenkins, Docker, Jira, Confluence, VSCode, Pycharm, Bitbucket, Linux

PROFESSIONAL EXPERIENCE

Google Summer Of Code 2023, Remote, US: Open-Source Developer — Jun 2023 - Sep 2023
- Part of the Zulip Terminal team, using Python and technologies like Urwid and Pytest.
- Authored, reviewed, and updated **10+** pull requests using git rebase workflow to contribute extensively to the project.
- Optimized message cycling algorithm by implementing caching for data, resulting in a **40%** reduction in API calls.
- Enhanced the user interface by integrating with the Zulip REST API, enabling real-time user profile and stream updates.
- Maintained a **90%** unit test code coverage for over **4000** LoC, ensuring robust software performance.

JP Morgan Chase & Co, Mumbai, India: Software Engineering Intern — May 2021 - Jul 2021
- Developed a Java automation tool to parse Excel sheets into Liquibase changelog files, cutting developer hours by **48x**.
- Designed a REST API for the tool using Spring Boot and created a developer-facing frontend using React.js.
- Impacted **30+** developers from the GXP teams in India and Singapore after the tool's adoption.
- Created the Software Design Document (SDD) for the tool using Confluence.
- Prioritized code quality by following Test-Driven-Development in JUnit, leading to **95%** code coverage for the tool.

Student Portal-VNIT, Nagpur, India: Web Developer — May 2020 - Apr 2022
- Developed the "Sign in with LinkedIn" feature using the LinkedIn API and OAuth2, increasing weekly logins by **30%.**
- Created "Project Corner", connecting students with professors for academic projects, using React.js and Django.
- Managed and added features to the deployed website (studentportal.live/home) on Linux infrastructure.

RELEVANT PROJECTS

Network Visualization and Comparison, *VAST 2020 MC1 Challenge (Team Project)* — Fall 2023
- Conducted data preprocessing with Python, NumPy, Pandas, and MySQL to clean and structure raw graph data.
- Created a web-based network comparison tool using D3.js, allowing users to analyze and compare networks interactively. (parth576.github.io/DV-Project/)

Healthy Meal Planner, *Hackathon Project* — Fall 2023
- Developed a meal planner app using React and Python to recommend healthy meals to users according to the user's current pantry. (github.com/Parth576/sunhacks)
- Used S3 to retrieve recipe information from the dataset and Lambda with API Gateway to serve as a recommender API.

Graph Manager, *Course Project* — Fall 2023
- Designed and implemented APIs for parsing, modifying, and analyzing graph structures, employing Java and Maven.
- Utilized JUnit to design and execute comprehensive unit tests, and implemented a CI/CD pipeline using GitHub Actions. (github.com/theViz343/Graph-manager)

Drone Delivery Planning System, *Hackathon Project* — Summer 2021
- Created a Django-based software solution employing genetic algorithms, written in Python, to schedule drone deliveries for essential packages strategically.
- Secured 3rd place in the Hackon with Amazon hackathon. (github.com/theViz343/Drone-Delivery-Management)