

# Poorvith Gowda

Melbourne, Victoria | [Portfolio](#) | [LinkedIn](#) | 0410876750 | [poorvithgowda10@gmail.com](mailto:poorvithgowda10@gmail.com) | [GitHub](#)

## Summary

Accomplished Software Engineer with a Master of Software Engineering degree from the University of Melbourne, possessing 2+ years of full-time experience designing, developing, testing, and maintaining enterprise web applications and software solutions for a globally recognised professional services firm serving diverse industries.

## Education

### Master of Software Engineering

University of Melbourne

Melbourne, VIC

### Bachelor of Engineering in Computer Science

Malnad College of Engineering

India

## Work Experience

### Research Assistant (Software Developer)

University of Melbourne

2023 - Present

Melbourne, VIC

- Led the development of [Nested Phoenix](#) under [André Stephan](#). This computational tool models the materials and environmental impact of buildings and urban areas, from individual components like windows and walls to entire neighbourhoods. It uses detailed data and maps to support sustainable planning, retrofitting, and circular economy strategies through life cycle assessment (LCA) and material flow analysis (MFA)
- Developed the front end using React, TypeScript, and Bootstrap to create a responsive and user-friendly interface, improving usability and navigation efficiency by 30%
- Built and maintained a scalable backend with Python and Django, reducing server response time by 25%. Containerised the application with Docker to streamline development and deployment, cutting deployment time by 40%. Managed and optimised the PostgreSQL database for faster queries and better data integrity across large datasets
- Drove the development and design of [Rephrase](#) under [James Helal](#), a cutting-edge software tool for building designers to assess embodied carbon, energy, and water, leading to a 50% increase in assessment efficiency
- Led front-end development initiatives utilising JavaScript and Tailwind CSS to craft an intuitive user interface
- Engineered a robust back-end system using Python and Flask, optimising REST API performance, and ensuring reliable data processing, with a secure authentication system developed using Firebase
- Deployed the application on Heroku and established a CI/CD pipeline, reducing release times by 50%, ensuring rapid and reliable updates

### Software Engineer

Accenture Solutions

2020 - 2022

Bangalore, India

- Led the Full-Stack development of a Customer Care Software System for an international client, resulting in a 40% reduction in customer response time and a 25% improvement in customer satisfaction scores.
- Engineered complex front-end features with JavaScript, React, and Tailwind CSS, enhancing the application's user experience and achieving increased user retention
- Designed and implemented a robust back-end system using Node.js, Express and MongoDB, optimising database schemas and RESTful APIs, which improved data retrieval speed
- Enhanced application compatibility across diverse user environments by employing advanced techniques such as feature detection, vendor prefixes, and Polyfills, ensuring a 99% cross-browser compatibility rate.
- Deployed the application on AWS and set up a CI/CD pipeline, which streamlined the deployment process and reduced release times by 50%

### Application Developer Intern

InflaMed Pty Ltd

2023 - 2024

Melbourne, VIC

- Designed and developed a clinician-focused health-tech web application using Next.js, TypeScript, and Material UI, resulting in a 35% improvement in user task efficiency and faster onboarding for new clinical staff
- Built a secure, scalable back-end using Python and Django, and implemented robust RESTful APIs to support seamless interaction between the front end and the medical database
- Managed healthcare data in compliance with FHIR standards, using Firebase's Realtime Database to ensure 99% data accuracy and real-time synchronisation across clinician dashboards
- Deployed the full-stack solution on AWS, improving system uptime to 99.9% and reducing infrastructure-related downtime by over 40%

## Projects

### August Robotics

Melbourne, VIC

#### Full-Stack developer

- As a Full-Stack developer, I drove the development of a comprehensive software system for managing and preserving critical operational data generated by the floor-marking robots of August Robotics
- I used TypeScript, Vue.js and Redux to develop the Front-end and I used Python for the back end, and Django to develop REST APIs to facilitate seamless communication between the front-end user interface and the back-end data repository, enabling efficient data exchange.
- Additionally, I was responsible for creating an interactive dashboard. This dashboard contained dynamic and interactive charts (developed using the vue-chart.js library) along with other required features, which served as a visual representation of the robot's performance and operational data
- In parallel, I assumed responsibility for establishing a robust CI/CD pipeline, utilising Docker for seamless production-level deployment
- Furthermore, I harnessed PostgreSQL for efficient data storage, ensuring the system's stability and reliability, aligning with August Robotics' mission to deliver cutting-edge solutions to their clients

### Finsplore – Smart Financial Assistant (*Under Development*)

Melbourne, VIC

#### Lead Developer

- Leading the development of an innovative financial management application focused on automation and accessibility, designed to simplify complex financial decisions for users without financial expertise
- Engineered a cross-platform mobile application using Flutter and Dart, creating an engaging and intuitive user interface that makes financial management accessible to users of all experience levels
- Developing a robust backend system using Java Spring Boot, implementing complex financial algorithms and data processing capabilities that power accurate financial projections and recommendations
- Integrated AI-powered assistant functionality that provides personalised financial guidance, helping users understand their financial situation and make informed decisions without requiring extensive financial literacy
- Designed dynamic data visualisation features that transform complex financial data into easily understandable graphical representations, increasing user comprehension and engagement by an estimated 50%

### Resource Monitoring and Alerting System

Melbourne, VIC

#### Developer

- Developed and implemented a comprehensive server resource monitoring and alerting system for a medium-sized e-commerce website hosted on Linux servers
- Implemented an alerting mechanism within the Bash scripts. When resource usage exceeded predefined thresholds, the scripts would trigger email notifications to the system administrators, providing them with detailed information about the issue
- Developed a suite of Bash scripts to monitor server resources, including CPU usage, memory consumption, disk space, and network activity. These scripts utilized Linux commands such as top, df, and netstat to gather real-time data
- The system's focus on proactive monitoring, automation, and detailed logging significantly enhanced the e-commerce platform's reliability, uptime, and performance by at least 35%

## Significant Highlights

- Involved in the complete Phase 1 development lifecycle of a customer care platform application named Speakeasy, created for the client Google
- Achieved the highest scores within the Computer Science Department, highlighting exceptional academic excellence throughout the final year of my Bachelor of Engineering studies
- The project titled 'Swarm Intelligence for Efficient Energy Management in MANET' was chosen from a pool of various proposals and received funding from the State Government through the 'Karnataka State Council for Science and Technology' initiative

## Skills

- **Programming Languages:** TypeScript | JavaScript | Python | Java | C
- **Web Applications:** React | Node.js | Tailwind | Vue.js | Next.js | HTML | CSS | jQuery | Vuetify
- **Framework:** Flask | Django | Maven | Heroku | Plotly Dash
- **Tools:** Confluence/Jira | Git | Jenkins
- **Cloud Services:** AWS | Azure | GCP | Heroku