

# Phanidhar Akula

Full-Stack Software Engineer | React, TypeScript, Python

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## Summary

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Full-stack software engineer with experience building and shipping production web applications using React, TypeScript, and Python. Strong foundation in data structures and system design, with hands-on experience delivering user-facing features, backend services, and cloud deployments. Comfortable owning features from UI through backend services, collaborating with stakeholders, and iterating based on real user feedback.

## Professional Experience

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### Graduate Assistant

Miami University – Department of Computer Science & Software Engineering

Oxford, OH – Aug 2024 – Present

- Designed and delivered full-stack web features used by students and faculty, translating academic workflows into intuitive UI and backend logic.
- Built and maintained React + TypeScript interfaces backed by Python services, focusing on reliability, performance, and clean API boundaries.
- Collaborated with faculty and researchers to prototype, test, and iterate on internal tools based on usability feedback.
- Improved frontend responsiveness and reduced redundant API calls by restructuring client-side state and data-fetching logic.

### Software Engineering Intern

Pathfinders Overseas Educations (Startup Consultancy)

Hyderabad, TG – May 2025 – Aug 2025

- Contributed production features across frontend and backend in a fast-moving startup environment.
- Implemented RESTful APIs and frontend components supporting core product workflows, emphasizing correctness and maintainability.
- Debugged issues across services and improved existing code paths after reviewing legacy implementations.
- Worked closely with product and design stakeholders to refine UX details before release.

### Freelance Software Engineer

Independent

- Designed and implemented a production payment gateway system handling request validation, transaction workflows, and database persistence.
- Built backend services using Python and MySQL and deployed cloud-hosted infrastructure on AWS.
- Balanced performance, security, and maintainability constraints while delivering under real client timelines.
- Provided ongoing maintenance and incremental improvements based on usage patterns.

## Projects

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### LumiAI: AI-Powered Educational Platform

MPV Live: [studywithlumi.com](http://studywithlumi.com) – Mar 2025 – Present

- Designed and built a full-stack web application using React, TypeScript, and Python.
- Implemented user authentication, API integrations, data persistence, and error handling in workflows.

- Integrated multiple external APIs to support conversational and educational features.
- Iterated on UX and performance based on real usage and beta user feedback.

### **Product Workflow Optimization Tool**

- Built a full-stack internal web application to simplify multi-step user workflows.
- Developed frontend logic in React + TypeScript with backend services in Python.
- Improved task completion speed by refining interaction flows and reducing unnecessary steps.

### **Scalable Web Application**

- Developed a modular web platform with reusable frontend components and backend services.
- Optimized API usage patterns to reduce redundant requests and improve perceived performance.
- Wrote unit-tested backend logic to support safe iteration and feature growth.

### **SimForge: Urban Simulation Research Platform**

- Built a reproducible benchmarking framework for urban commute simulations.
- Designed scalable execution pipelines in Python, focusing on performance measurement and reproducibility.
- Focused on reproducibility, performance measurement, and structured experimentation.

## **Skills**

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Languages: Java, TypeScript, JavaScript, Python

Frontend: React, TypeScript, HTML, CSS

Backend: Python, REST APIs

Databases: MySQL, PostgreSQL

Cloud & Dev Tools: AWS, Git, Docker

Core CS: Data Structures, Algorithms, Object-Oriented Design

Engineering Practices: Debugging, Code Reviews, Testing, System Reliability

## **Education**

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### **Master of Science in Computer Science**

Miami University | GPA: 3.85 | Oxford, OH – Aug 2024 – May 2026

### **Bachelor of Technology in Computer Science**

Malla Reddy University | Hyderabad, TG – Aug 2020 – May 2024

## **Certifications**

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AWS Cloud Foundations (Coursera)

Software Engineering & Systems (Coursera, NPTEL)

## **Leadership**

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### **President**

Miami University – Graduate Students of Color Association (GSCA)

Oxford, OH – Aug 2025 – Present

- Lead a graduate organization of 100+ students.
- Organize campus-wide events and coordinate with faculty, alumni, and student groups.