

Education		
Northeastern University		Boston, MA
Master of Science, Information Systems (full stack infrastructure emphasis)		Sep 2023 - Expected Apr 2025
Relevant courses: Algorithms, Linux/UNIX, Web and API development, Object Oriented Design in Java, Design patterns, Operating Systems		
University of Mumbai		Mumbai, IN
Bachelor of Engineering, Electrical Engineering & Computer Science		Aug 2018 - May 2022
Relevant courses: Programming in C, Object Oriented Design, Databases, Computer Networking & Architecture, Big Data, Map Reduce, Hadoop, Image Processing		

Work Experience		
Northeastern University		Boston, MA
Graduate Teaching Assistant		Sep 2024 - Apr 2025
<ul style="list-style-type: none">Instruct students in C++, C#, JavaScript, Git, GitHub and the Agile methodology through 1-on-1 sessions and online communications.Run weekly office hours, breaking down tough concepts and debugging live for 25+ students, including pair programming when necessary.		
Cognizant		Mumbai, IN
Software Engineer I - Web Services team		Aug 2022 - Jun 2023
<ul style="list-style-type: none">Built and maintained an in-house React component library with 28+ reusable and themeable UI elements. Used by 5+ teams to improve development speed and maintain visual consistency.Engineered a payments app for internal stakeholders by integrating Stripe using React, Python (Django), Apache and AWS, supporting 40+ local payment gateways and 130+ currencies.Developed pixel perfect UI as per wireframes from the UX design team for OneCognizant (company-wide appstore). Built in React, Tailwind, SCSS and Typescript.Write integration tests with Playwright and React Testing Library to validate end-to-end user workflows - ensuring 90%+ test coverage.Refactored a monolithic app into modular Python microservices, enabling service-specific deployments and minimizing downtime during updates.Developed a well documented Python module that simplified application deployment workflow that automates containerization with Docker and Terraform resulting in a one-click deployment solution.		
Raftlabs		Remote
Full Stack Application Engineer (Founding Engineer)		Apr 2021 - Aug 2022
<ul style="list-style-type: none">Revamped a financial loyalty app for the Bank of Ireland using React, GraphQL, Python (Django), and Docker to streamline revenue tracking and help customers gain rewards.Developed a website for a supply chain analytics tool, optimizing delivery schedules and inventory management with scalable React, and Java. Used the in-browser IndexedDB for local caching resulting in extremely fast user experience.Integrated Meta's webhooks with Shopify and Node.js to help viewers buy products by commenting codes in Facebook live streams.Coded a proof of concept for an efficient coupon distribution system in Typescript, Node.js and PostgreSQL that could handle 2000 requests per second.Implemented an automated CI/CD pipeline using GitHub Actions and Python to schedule blog posts for the marketing team - resulting in an efficient workflow with no manual overhead.		

Projects (Infrastructure and full stack based)		
Model-0 - Platform as a Service		github.com/athkdev/model0
<ul style="list-style-type: none">Full stack web app for creating and deploying AI chatbots with AWS SageMaker providing integration for developers in less than 4 minutes.Set up HTTP Apache server with Amazon EC2 instance to handle swift load balancing and secure encryption by setting up a SSL certificate.Developed a robust REST API with authenticated routes for communicating with SageMaker API to manage creation, and tuning of ML models. Create permissions in Linux for Apache server by adding it to the current user group.Configured a reverse proxy between the Apache route traffic from web and localhost for serving a dynamic Next.js app.Built a GitHub actions CI/CD pipeline that deploys code on an EC2 instance automatically once code is pushed to GitHub.Used Next.js, React.js, REST API, Typescript, PostgreSQL AWS SageMaker and AWS EC2. Deployed here.		
Mental Health Counseling AI Chatbot		github.com/athkdev/legacytheapp
<ul style="list-style-type: none">Chatbot-powered full stack app designed for mental health counselors to make informed decisions while actively counseling.Extracted NLP insights from a dataset of 3000+ counsellor-client sessions and stored them in PostgreSQL database for filtering and pagination.Integrated an OpenAI-powered chat that is pre-trained to respond like a counsellor with guided conversations to improve accessibility.Built with OpenAI, Next.js, React, Typescript, Node.js, Python and PostgreSQL. Deployed here.		

Technical Skills	
DevOps & Systems	Linux (Fedora and Ubuntu), Bash, Docker, Jenkins, Terraform, CI/CD, GitHub Actions, REST APIs, Cloudflare, Git
Backend & Databases	Python, Django, Go, Java, Spring Boot, GraphQL, C++, SQL, MySQL, MVC API design, Bash, npm, HTTP, TCP/IP
Frontend	React, Typescript, JavaScript, Next.js, Vue.js, Vite, npm, JQuery, Tailwind, Three.js, HTML, CSS
Data & AI	ETL Pipelines, AWS EC2, AWS SageMaker, LangChain, OpenAI, Pandas, Numpy, Matplotlib, Plotly, PyTorch, Apache Kafka