ATHARVA DESHPANDE

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EDUCATION

Northeastern University : M.S. in Information Systems — Expected 2026
Coursework: Application Engineering and Development, Web Design, Object-Oriented Design, Cloud Computing

Savitribai Phule Pune University : B.E. in Electronics & Computer Engineering — 2018 - 2022

SKILLS

Languages	Java, Python, C/C++, JavaScript, TypeScript, Golang, HTML, CSS, Shell Scripting
Technologies	AWS, Google Cloud, Docker, Kubernetes, Terraform, React.js, Node.js, Express, Git, JIRA, Postman
Databases & Systems	MySQL, PostgreSQL, MongoDB, Redis, Linux, Ubuntu, Windows, VS Code, IntelliJ

WORK EXPERIENCE

Northeastern University : Application Processor — Oct 2024 – Present
- Developed **React.js** frontend with 12+ reusable components that reduced page load times by **35%** while ensuring WCAG 2.1 accessibility standards compliance across desktop and mobile platforms
- Built RESTful **Node.js** APIs handling **5,000+** daily requests with **Sequelize ORM** for MySQL, implementing automated schema creation and database migrations that reduced data access time by 35%
- Implemented **GitHub Actions** CI/CD pipeline for automated testing, building, and deployment with **90%+** test coverage that reduced release cycles from 3 days to 6 hours
- Configured **AWS** infrastructure using **Terraform** (EC2, VPC, security groups) with user-data scripts that reduced environment setup time from 4 hours to **25 minutes**

Satronics Enterprises : Full-Stack Developer — Sept 2023 – Apr 2024
- Built a full-stack order management portal for electronics clients using React.js, Tailwind CSS, Express.js, and PostgreSQL, serving 8,000+ users with sub-200ms response time and 99.5% uptime
- Designed modular frontend with custom React hooks, lazy loading, and code-splitting to reduce bundle size by 45%, and deployed containerized infrastructure on AWS (Docker, Kubernetes, RDS, S3) for secure, auto-scaled performance across AZs.
- Built automated CI/CD pipelines with GitHub Actions to generate Packer-based AMIs, refresh instances in auto-scaling groups, and enable zero-downtime deployments, while integrating CloudWatch to collect 2GB+ logs/day and custom metrics that cut incident response time from 35 to 12 minutes

Persistent Systems : Software Engineer — Feb 2022 – Aug 2023
- • Contributed to IBM's enterprise SaaS cloud migration from Microsoft Azure to AWS, owning backend development, infrastructure provisioning, deployment automation, and participating in system design for scalable, production-grade applications
- Developed and optimized **Golang APIs** for the Open Service Broker (OSB) layer, enhancing service provisioning and significantly reducing latency under high-load scenarios
- Wrote comprehensive **unit and integration tests** to ensure endpoint reliability and maintain 95%+ test coverage, improving deployment confidence and reducing production bugs
- Built custom AMIs with Packer and provisioned AWS infrastructure using Terraform (EC2, VPC, subnets, SGs), automating end-to-end CI/CD with GitHub Actions to cut release cycles from 2 days to 6 hours

PROJECTS

Cloud-Native Web Application Infrastructure — Jan 2024 - Present
- Architected **AWS** infrastructure using **Terraform** with VPC across 3 availability zones, **Route53** DNS configuration, load balancers, and **auto-scaling groups** with min/max instance policies
- Implemented secure database connectivity using **RDS** in private subnets with custom parameter groups, **KMS encryption**, and **secrets management** for credential storage
- Built CI/CD pipeline using GitHub Actions that created custom AMIs with **Packer**, shared them across AWS accounts, and performed **automated instance refresh** for zero-downtime deployments
- Configured comprehensive monitoring with **CloudWatch** for application metrics, API response times, and system health with proper **IAM roles** for secure access and custom alerting thresholds

Student Tracking Platform — Oct 2024 - Dec 2024
- Built **MERN stack** platform with role-based access for professors, students, and TAs serving **500+** users with sub-800ms page load times
- Implemented **JWT authentication**, role-based permissions, and email validation that eliminated unauthorized access attempts
- Engineered file submission system handling **2GB+** weekly uploads with **99.9%** availability and secure **S3 storage**

Netflix Clone — Feb 2024 - Present
- Developed responsive Netflix clone with **React.js** that achieved **95%** Lighthouse score with **120ms** initial load time
- Integrated **TMDB API** with caching strategy that reduced API calls by **60%** while displaying 5,000+ movies/shows
- Built interactive interface with category-based filtering and personalized recommendations for **1,000+** users