

Tasleema Shaik Mohammed

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EDUCATION

Binghamton University

Masters in Computer Science, GPA: 3.77

Binghamton, NY

Dec 2025

SKILLS

Frontend: Angular, Unity, React

Backend: Spring Boot, Hibernate, Node.js, TypeScript, Express

Databases: NoSQL, PostgreSQL, MongoDB

Cloud & Infrastructure: AWS, GCP, Azure, GKE, Docker, Kubernetes, Terraform, Nomad, Vault, Minio, Protocol Buffers, gRPC, Helm, AKS

Technologies: Distributed Systems, Unit Testing, Prototyping

Tools: Git, GitHub, GitLab, Jenkins, Jira, Confluence

CI/CD, DevOps, Agile, SDLC, Data Pipelines, NumPy

Machine Learning, Pandas, TensorFlow, PyTorch

Languages: Golang, Java, Python, C, C#, JavaScript, SQL, PowerShell, Bash, HTML/CSS

Other: Open-source Technologies, Elasticsearch, API Design

PROFESSIONAL EXPERIENCE

New Energy New York

Java Developer

Binghamton, NY

Sep 2024 – Nov 2024

- Added an optional *roleId* parameter and a global interceptor improving permission validation on all CRUD endpoints by 30%
- Centralized filtering logic in an interceptor, enforcing role-based access by 25% without requiring schema changes.
- Developed two new API endpoints ('sendEmail' and 'sendSMS') in alarms service: configured email delivery using a personal SMTP account and integrated MSG91 for SMS enhancing communication efficiency by 91%.

Synopsys

Software Engineer II

Hyderabad, India

Nov 2021 – Jan 2024

- Led the cloud scan team as a core member, contributing to 4 business products: [Polaris](#), [CNC](#), [Coverity Connect](#) & [SCA](#).
- Implemented a new DB tuning model for [Coverity Connect](#) based on DB admin's input to optimize the performance of connect through cov-admin-db tune command(DB & JVM settings) achieving a 25% increase in application performance.
- Implemented & deployed the tuning model on [CNC](#) ensuring compatibility across 3 cloud providers(AWS, Azure, GCP).
- Optimized DB performance by integrating the [PGPOOL2](#) middleware tool, effectively load balancing and distributing read queries across [read replicas](#), resulting in improved query response time that reduced more than 100% of the load time.

Software Engineer I

May 2019 – Nov 2021

- Developed new features and optimizations for the Autoscaler project, enhancing performance and reliability. Maintained the legacy java jobfarm project by fixing bugs actively where the current scanning orchestration was active in the production.
- Led the transition of a legacy Java jobfarm to a GoLang microservice(scanfarm-jobs-service), achieving 25% increased throughput monitoring functional parity, maintaining jobs orchestration process seamless workflow in cloud deployment.
- Developed scanfarm-runner from scratch, a Go executable that manages [Coverity](#) Analysis phase on cloud made scanning 2x times faster, that laid groundwork for Cloud Native Coverity platform where Capture phase was also done on cloud services.
- Collaborated with cross-team members for the implementation of an executable similar to scanfarm-runner for [SCA](#), [BDBA](#).
- Built a Python tool to export production MongoDB data by date range, streamlining OPS debugging 4x times better.

Software Engineer Intern

May 2018 – Apr 2019

- Developed a horizontally scalable job processing system with heterogeneous platform support for the [Polaris](#) product, leveraging [Nomad's](#) Batch Processing system for execution on Linux and Windows achieving a 100% chance for all scans.
- Designed GateKeeper, AutoScaler. With these new modules,scanfarm became reliable and scalable. Polaris became a USP in the Software Security world, where no other top competitor has the auto-scaling ability of scan engines achieving 2x sales.
- Implemented Gatekeeper component that takes care of scan throttling with which we can control the customer scan limits(i.e how many concurrent scans a customer can run), which helped the observability team efforts reduce by 80%.
- Written Autoscaler component that takes care of dynamic resource allocation, with which we can create/delete the virtual machines in the Google Cloud Platform, based on requirements that resulted in reducing the resource wastage by 70%.

PROJECTS

ExAdvisor | React, Node/Express, Ollama with Llama Model

Oct 2025

- Built a privacy-first chatbot with React and Node/Express, designing a rule engine around TQI and communication.
- Integrated a local LLM via Ollama using a Llama model with a strict JSON contract; achieved 98% valid structured responses, 100% offline processing with an rules-only fallback, increasing reliability and data privacy.

PathSpotter.AI | Python, Computer Vision

Apr 2025

- Created a vision-language-powered campus navigator built using Google's Gemini API, featuring multimodal reasoning for map parsing, routing, navigation, strategies for robust JSON extraction improved efficiency by 25%.
- Applied techniques for overlaying AI-generated annotations (dots and routes) onto real images using OpenCV and Matplotlib.

Code AVP | React, Java Spring Boot

Feb 2024

- Designed an intuitive code editor that converted user-written code into UML diagrams, improving visual representation by 25%.
- Integrated OpenAI's ChatGPT to analyze and provide specific code improvement suggestions, leading to a 1x times better code.
- Combined modern web development technologies and AI to create an intuitive & efficient platform, resulting in a 30% increase.