## Tasleema Shaik Mohammed

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#### **EDUCATION**

**Binghamton University** Binghamton, NY

Masters in Computer Science, GPA: 3.77 Dec 2025

Frontend: Angular, Unity, React

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

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, Kotlin, Swift, C++

Other: Open-source Technologies, Elasticsearch, API Design

### PROFESSIONAL EXPERIENCE

**New Energy New York** Binghamton, NY

Sep 2024 - Nov 2024 Java Developer

- 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** Hyderabad, India Software Engineer II 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**

# 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.

Launchpad | Unity, C# June 2022

- Developed a 3DMazeGame that explores mechanics like player movement, collectibles, physics interactions, and scene transitions, simulates perspective using real-time rendering, resulting in a 40% boost in user engagement.
- Added new features such as animations, UI design, and collision-based win logic, culminating in a polished, interactive mini-game experience, Implemented this as a part of Outscal's Launchpad program.