Kowshik Islam

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LANGUAGES AND TECHNOLOGIES

Languages, Libraries and Frameworks: JavaScript, TypeScript, Node.js, Python, C#, Express.js, React, SQL, HTML, CSS, Storybook, Redux, NUnit, Supertest, Jest, React Testing Library, Tailwind, Material UI (MUI)

Cloud Technologies: AWS CDK, ECS, EC2, Fargate, IAM, EFS, VPC, Lambda, CloudWatch, Cloud Map, RDS, DynamoDB, CloudFront, Amazon Route 53, S3, SQS

Other Technologies: PostgreSQL, MongoDB, SQLite, Redis, Jenkins, Git, Docker, RESTful APIs, Swagger/OpenAPI, Nginx, RabbitMQ, Elasticsearch, Kibana, Logstash

EXPERIENCE

Software Integration Engineer, *OFGO Studio*   02-2019 – Present | Vaughn, Canada
Led order-to-production platform development.

- Architected and implemented a software system with a Task Creator and Scheduler, achieving a 10x throughput increase by distributing tasks across multiple worker nodes instead of a single monolithic node, designed for easy scalability with the potential for further gains by adding more nodes.
- Reduced worker node downtime by up to 50% by implementing a heartbeat protocol for consistent status checks and automatic recovery, coupled with enhanced logging for rapid error resolution and debugging.
- Developed scalable RESTful APIs to eliminate inter-app dependencies, enhancing system modularity and facilitating scalable infrastructure updates.
- Designed and integrated front-end components, ensuring seamless backend integration and comprehensive system testing, which improved user interface responsiveness and system reliability.
- **Tech Stack**: JavaScript, TypeScript, C#, Python, VB.NET, RabbitMQ, AWS

Software Engineer, Co-Creator, *Herald* ↗   01-2023 – 10-2023 | Remote
Developed Herald, an open-source observability tool using Elasticsearch, Logstash, Kibana, and AWS, enabling real-time monitoring of distributed applications with the capacity to process over 3 million lines of logs in 5 minutes.

- Streamlined the deployment and operation of Herald using AWS CDK and CLI, transforming hours of manual setup into a few clicks.
- Architected a scalable microservice structure for Herald using AWS CDK, establishing a robust foundation that supports flexible and scalable cloud components.
- Implemented TLS encryption and IAM security measures, bolstering security across Herald's services.
- **Tech Stack:** JavaScript, ELK Stack (Elasticsearch, Logstash, Kibana), AWS

SOFTWARE ENGINEERING PROJECTS

- **TaskMinder:** Developed a multi-tier task management app using vanilla JavaScript (frontend) and Node.js/Express (backend), featuring user authentication and a RESTful API. Employed server-side rendering to explore its benefits and understand non-SPA application paradigms.
- **Trading Robot:** Developed a Python-based algorithmic trading tool to explore day trading strategies and automate trading decisions based on market data.

EDUCATION

Software Engineering, *Launch School* ↗   01-2021 – 12-2022 | Remote

BEng Mechanical Engineering,   2011 – 2016 | Toronto, Canada
Ryerson University (*Now Toronto Metropolitan University*) ↗