

# Alvin Mahmud

Staten Island, NY, United States · [alvin.mahmud@gmail.com](mailto:alvin.mahmud@gmail.com) · (917) 572-0010 · [linkedin.com/in/alvin-mahmud/](https://www.linkedin.com/in/alvin-mahmud/)

## EXPERIENCE

---

### Software Engineer

July 2022 – December 2024

#### Fiserv (Clover)

Berkeley Heights, NJ

##### Payroll & Onboarding

- Collaborated with designers to translate UI/UX specifications into reusable React components, ensuring a scalable and consistent onboarding process.
- Integrated third-party payroll APIs using React, TypeScript, Java, and Spring Boot to streamline paycheck processing, tax calculations, and direct deposit management.
- Leveraged Kafka for event-driven payroll processing, enabling seamless and efficient data flow across services.

##### Employees Dashboard

- Implemented a Schedules dashboard following Clover's microfrontend/microservice architecture, allowing business owners to assign shifts and manage employee availability efficiently.
- Migrated legacy Device Passcode page from Ember to React, improving maintainability and performance by 30% via modern technologies.
- Developed a search and filtering system using React and TypeScript, allowing business owners to efficiently find employees by name, role, and onboarding status.
- Refactored custom React hooks to better handle asynchronous employee data fetching and state updates, reducing bugs and improving reliability.

##### Merchant Profile

- Spearheaded a full-featured business logo upload system using React and Typescript, validating file format and size through backend API calls.
- Integrated Google and Yelp API to display real-time reviews and business information, aiding user engagement for over 700,000 businesses.
- Orchestrated micro-app deployment using Jenkins, Docker, and Kubernetes for scalability and availability.
- Monitored application performance and resolved incidents while on call using Grafana and Datadog, enhancing system stability by 20%.

### Lead System Administrator

June 2021 – June 2022

#### SOBA College Recovery

New Brunswick, NJ

- Administered user access and permissions in Active Directory, ensuring secure authentication and compliance.
- Oversaw a Pi-hole initiative to enhance network security and ad blocking across office locations, developing a Python program for users to monitor traffic and manage blocked domains.

### Software Engineer Research Assistant

January 2021 – May 2021

#### Stony Brook University

Stony Brook, NY

- Implemented role-based access control (RBAC) using Java, ensuring only authorized students and instructors could submit and review assignments.
- Designed and optimized MongoDB schemas to store student data, classwork submissions, and grades, ensuring fast retrieval and efficient querying.

## SKILLS

---

**Languages:** JavaScript, Typescript, Java, Python, CSS, HTML, SQL

**Technologies:** React.js, Spring Boot, Node.js, Kafka, MongoDB

**Developer Tools:** Git, AWS, GCP, Kubernetes, Docker, JSON, XML, Confluence

## EDUCATION

---

### Stony Brook University

B.S. in Computer Information Systems

Stony Brook, NY

2017 – 2021