



Relevant Skills

Languages: *Typescript, Python, PHP, Java, C++, Go, SQL, HTML, CSS*

Frameworks & Libraries: *React, Next.js, Express, GraphQL, Apollo, Django, Flask*

Cloud & DevOps: *AWS (AppSync, Lambda, Fargate, ECS, EC2, S3, DynamoDB, CloudFront, API Gateway, OpenSearch), GCP (BigQuery, Cloud Storage), Docker, Terraform*

Databases & Caching: *MySQL, MariaDB, MongoDB, Redis*

Work Experience

Konrad Group - Senior Software Engineer

July 2021 - Present

Bayer (Farmer Experience US Application)

Led the development of a scalable web ecosystem and backend infrastructure to streamline digital tools for farmers

- Collaborated with designers and stakeholders to deliver 20+ reusable TypeScript components for new features, focusing on multi app use and scalability within NextJS monorepo
- Led development of the post-auth microservice, containerizing a Node.js backend with Docker and deploying to ECS to ensure high availability, leveraging CloudWatch for observability, and MongoDB for flexible data storage
- Engineered optimized MongoDB schemas and CRUD operations, focusing on data integrity and high-speed retrieval for authenticated user sessions
- Enhanced a serverless GraphQL Backend-For-Frontend service on AppSync by building and maintaining resolvers/ Lambda functions, and streamlining data aggregation from multiple backend services
- Designed and integrated Redis cache layer which reduced database load by 50%, quickened query response times, and improved user experience
- Developed AI chatbot front-end by building reusable React components and integrating server-side REST endpoints to query the client's model, improving initial render performance by 25%
- Helped interview candidates and mentored junior developers to ensure smooth onboarding process

Konrad Group (Internal Employee Portal)

Modernized internal tooling by optimizing legacy services, implementing new features, and improving user experience

- Refactored legacy data fetching into new GraphQL service, organizing backend querying and improving key query performance by 30%
- Built an end-to-end events management platform by designing MariaDB data models, extending the Apollo GraphQL APIs on EC2, and developing the React UI front-end
- Improved employee onboarding experience by integrating AWS S3 for scaleable photo storage, resolving long standing bugs and delivering a more reliable application

Deloitte (Internal Auditing Application)

Developed high-performance frontend architecture and reusable components to streamline the client auditing process

- Leveraged React Context and Redux for scalable state-management system, reducing extra network calls by 80% and improving user experience
- Developed real time notification system using Socket.IO, providing instant updates of document changes to users and improving efficiency of auditing process

Projects



[Link to Game](#)

Online Multiplayer Card Game (Web Based Version of Card Game 'Coup')

- 60+ active users at its peak, spanning 5 countries, with over 100 games
- Automated scalability of platform by distributing load to four Firebase instances while maintaining performance
- Developed multithreaded algorithm for state changes, focusing on reliability, speed, and user experience

Education

Bachelor of Applied Science in Mechanical Engineering, *University of Waterloo* (2021)

Relevant Courses: ECE 406 - Algorithm Design and Analysis