VINOD KRISHNA SELPOL

312-687-2047 | vinodselpol@gmail.com | Chicago, Illinois
GitHub | Personal Website | Linkedin

EDUCATION

Masters in Computer Science | Illinois Institute of Technology, Chicago, Illinois | (GPA - 3.7)   *Aug 2022 - May 2024*

Bachelors in Engineering | Acharya Institute of Technology, Bangalore, India | (GPA - 3.7)   *Aug 2014 - Dec 2018*

WORK EXPERIENCE

Software Engineer Intern - Amazon, Boston, USA   *May 2023 - Aug 2023*
Tech Stack: ReactJS, Rust, Javascript, Typescript, AWS, RestAPI
- Designed and implemented a dashboard for the observability platform to show various metrics using Typescript.
- Led the design and development of a metadata API using Rust and MySQL, enabling real-time access to running tables and comprehensive metadata about the ER service.
- Optimised ETL processes for a substantial dataset of ~50 million rows from S3, achieving a 65% reduction in ETL time through parallel execution on multiple threads.
- Implemented strategic database schema optimisation, indexing techniques, and query execution plans, resulting in an impressive 400% improvement in query performance.

Software Engineer - Northvolt, Stockholm, Sweden   *Dec 2019 - May 2022*
Tech Stack: ReactJS, NextJS, Javascript, React Testing Library, MySQL, HTML, CSS
- Using React and ES6 stack to develop the user interfaces of applications and reusable components.
- Worked on client side security mitigation by implementing 3rd party libraries and also wrote in-house functions to sanitise the user inputs thereby helping the security to close ~10 high and ~20 medium to low priority security issues.
- Achieved a 15% increase in the conversion rates due to significant improvement in user experience by implementing browser caching.
- Reduced technical debt by refactoring legacy code, achieving a 30% decrease in bug reports and major improvements.
- Wrote unit test cases in React Testing Library for the core components which were shared among different teams.

Software Engineer Intern - Einride, Stockholm, Sweden   *May 2019 - Nov 2019*
Tech Stack: Javascript, Typescript, ReactJS, HTML, CSS
- Developed and implemented frontend architecture to support user interfaces using ReactJS and Typescript.
- Wrote unit tests in jests and improved the test coverage by ~2%.
- Optimised and refactored the code in the application workflow and reduced the redundancy.
- Actively involved in conducting bug bounty and also fixing ~4 bugs per weeks from bugs backlog.
- Participated in code reviews and ensured that all solutions are aligned to predefined design specifications.

TECHNICAL SKILLS

- **Programming -** Javascript, Typescript, Python, C++, Rust, Go.
- **Database** - MySQL, MongoDB, Postgres, DynamoDB.
- **Web Dev and Frameworks** - HTML5, CSS, Bootstrap, ReactJS, NextJS, NodeJS, Express, Tailwind, Redux, Flask.
- **DevOps tools -** Jenkins, Docker, Git, Terraform, Ansible, Kubernetes, Puppet.
- **Familiar with** - AWS, Android, Figma, Firebase, React Testing Library, Postman, RestAPI, GraphQL.

PROJECTS

University E-commerce store— *ReactJS, NodeJs, Express, Postgres* (github)
- The full stack web app built using react as frontend and express as backend. The students can buy/sell the items on the store. Implemented comprehensive CRUD (Create, Read, Update, Delete) operations for managing product listings.
- Developed and integrated a secure user authentication system using JSON Web Tokens (JWT).
- Integrated the checkout page with third party API and achieved seamless payment processing with the Stripe API.

Real estate App - *ReactJS, NodeJs, Flask, GCP, MongoDB, Redux, Tailwind* (github, url)
- Design and implemented a modern real estate booking app using React and nodes. The users can create a profile using JWT and Google authentication.
- Enriched the application by integrating with the Google cloud platform to store objects/images.