VINOD KRISHNA SELPOL

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EDUCATION

Masters in Computer Science | Illinois Institute of Technology, Chicago, Illinois | (GPA - 3.833) Aug 2022 - May 2024

Bachelors in Engineering | Acharya Institute of Technology, Bangalore, India

Aug 2014 - Dec 2018

WORK EXPERIENCE

Software Engineer Intern - Amazon, Boston, USA

May 2023 - Aug 2023

Tech Stack: ReactJS, Rust, Javascript, Typescript, AWS, RestAPI

- Developed a dashboard for the observability platform to show various metrics using Typescript.
- Developed and deployed a metadata API using Rust and MySQL, enabling real-time access to running tables and comprehensive metadata about the ER service.
- Optimized 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 optimizations, 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

- 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 sanitize the user inputs thereby helping the security to close ~10 high and ~20 medium to low priority security issues.
- Collaborated with a team of experienced engineers to develop an efficient solution for a feature to remind users frequently to link their services.
- 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

- Developed and implemented frontend architecture to support user interfaces using ReactJS and Typescript.
- Wrote unit tests in jests and improved the test coverage by $\sim 2\%$.
- Optimized 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.
- Database MySQL, MongoDB, Postgres, DynamoDB.
- Web Dev and Frameworks HTML5, CSS, Bootstrap, ReactJS, NextJS, NodeJS, Express, Tailwind, Redux.
- Familiar with Git, AWS, Android, Figma, Firebase, React Testing Library, Postman, RestAPI.

PROJECTS

Netflix clone App - *ReactJS*, *Tailwind*, *RestAPI* (github, url)

• The web app built using React. The web app has many functionalities including payment gateway integrated using Stripe API. It fetches dynamic data from external API endpoints.

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. It has many functionalities like ability to perform CRUD operations, authentication using JWT and payment integration using Stripe API.

Stock Market App - ReactJS, MaterialUI, Finhub API (github, url)

• Stock-Market app built using ReactJS displaying the real time stock data and also market news.