

# THARSEKEN NAVAJEEVAYOKAN

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## SUMMARY

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- **Programming Languages:** Python, JavaScript, Java, C++, TypeScript, C
- **Technologies:** AWS, Django, React, Redux, Docker, Nginx, MongoDB, Git, SQL, Google Firebase, GCP

## EDUCATION

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**University of Waterloo** Sept, 2017 - Apr, 2022  
Candidate for Honours Bachelor of Applied Science in Computer Engineering GPA: 3.7 / 4.0

Relevant Courses: Algorithms and Data Structures, Fundamentals of Programming, Numerical Methods, Systems Programming and Concurrency, Embedded Microprocessor Systems

## EXPERIENCE

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**Software Development Engineer Intern** May, 2021 - Aug, 2021  
*Amazon*

- Designed and developed AWS Lambda APIs that enabled external teams to modify fulfillment centre employee shift details, allowing for more dynamic and accurate labor plan estimations
- Configured custom token-bucket algorithm rate limiting in AWS API Gateway to throttle gateway requests
- Refactored Cloudwatch dashboard configuration and metric collection to improve composite alarm creation

**Software Engineer Intern** Sept, 2020 - Dec, 2020  
*Intuit*

- Developed and implemented scalable GraphQL APIs to query and resolve TurboTax customer reviews
- Introduced webpack in React build process to reduce bundle size by 25% and improve deployment times
- Migrated TypeScript React components to JavaScript, creating reusable web components for the TurboTax Canada marketing website

**Software Engineer Intern** Jan, 2020 - Apr, 2020  
*Intuit*

- Introduced BI tool using NetworkX and Matplotlib to visualize content network and cyclic dependencies
- Developed API service to generate tax summaries using financial data, used by Intuit tax specialists
- Integrated Python data migration pipeline in content publishing environments, reducing authoring times

**Software Engineer Intern** May, 2019 - Aug 2019  
*TimeSaved*

- Refactored server database logic to use data aggregation pipelines, improving data processing by 11%
- Developed a real-time group messaging platform across web and mobile clients using socket libraries
- Integrated infrastructure to increase user data collection by 37%, enabling Google Analytics data pipelining

## PROJECTS

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### WatchTyger

*Python, JavaScript | React, Django, AWS (EC2, RDS, SES), Nginx, Docker*

- A web platform that allows users to define house search criteria (city, price, property type, etc.) and regularly emails them any property listings that match
- Utilizes scheduled cron job and Amazon SES to obtain and email new property listings to users nightly

### Product Monographs

*JavaScript | React, Node, Express, MongoDB, AWS, Docker*

- A web platform deployed using Docker and AWS EC2 that allows regulatory firms to create, edit, and manage pharmaceutical submissions for Health Canada
- Developed textual auto-complete search of existing XML submissions using AWS ElasticSearch
- Implemented a content management system with filtering, revisioning, and document version control