Mark Lin

J 647-985-4566 **☑** mark.lin2234@gmail.com **in** linkedin.com/in/marklin2234/ **⑤** github.com/marklin2234

EDUCATION

University of Waterloo

Sept 2020 - Apr 2025

Bachelor of Mathematics – Statistics & Decision Theory

Waterloo, ON

Relevant Coursework: Introduction to Combinatorics, Calculus 3, Linear Algebra 2, Mathematical Statistics, Stochastic Processes, Applied Linear Models, Management Information Systems

National University of Singapore

Aug 2023 - Dec 2023

Incoming Student International Exchange – School of Computing

Singapore

Relevant Coursework: Software Engineering & Object-Oriented Programming, Computer Organisation, Data Structures and Algorithms

EXPERIENCE

Software Engineer Intern @ Cover

May - Aug 2023

Python, Flask, Vue.js, Nuxt.js, Firebase, AWS, PostgreSQL

Los Angeles, CA

- Designed and implemented a set of algorithms that efficiently generate component layers for housing designs.
- Streamlined the onboarding process for potential clients by remodeling our property assessment procedure.
- Refactored our internal software and API to improve performance of our app by 100%.
- Spearheaded the launch of Cover S which increased sales, and reduced production and manufacturing costs.

Software Engineer Intern @ Drop Technologies Inc.

Sept - Dec 2022

React Native, Ruby on Rails, AWS, Docker, Kubernetes, XCode, Redis

Toronto, ON

- Took ownership and led the team to complete a major project increasing shop engagement by 20%.
- Improved performance of the app by identifying and fixing **N+1 queries** in our internal API.
- Implemented custom alerts tailored to the individual shoppers based on recent shopping history.
- Designed, developed and tested an end-to-end algorithm that determined when and which alerts to display to shoppers.

Software Engineer Intern @ TD Securities

Jan - Aug 2022

Angular.js, Scala, Python, React.js, Node.js, SQL

Toronto, ON

- Developed global development resources for front office trading desks in NYC, London, Singapore and Toronto.
- Worked on our flagship application dedicated to intra-day real-time management of Fixed Income and FX risk.
- Improved performance of trading servers by writing Python scripts which helped discover and solve server lag issues.
- Created a complex risk trade curve editor using React.js and developed our internal RESTful API.
- Led weekly social meetings as a committee leader with 20+ attendees for international co-ops and associates.

Software Developer Intern @ Year Zero Studios

May - Sept 2021

React.js, Firebase, Stripe, Typescript, Vercel

Toronto, ON

- Assisted the Product Manager in the onboarding process and increased app usage by over 100%.
- Redesigned the entire website, refactored our RESTful APIs and architected the backend in Firebase.
- Added Cypress and Sentry to standardize deployment procedures through unit tests to reduce bugs in production.
- Implemented payment methods and scheduling with Stripe and Zoom API's.

Software Developer Intern @ DxChain Network

Aug - Sept 2019

Solidity, web3.js, HTML/CSS, Node.js

San Francisco, CA

- Created an optimised smart contract on the Ethereum blockchain using Solidity and Node.js.
- Built a decentralized application where users can pool their ether to earn the chance of increasing profits.
- Architected and developed the entire Solidity backend and designed the frontend of the application using HTML/CSS.

PROJECTS

NoteWarrior | React.js, Next.js, MongoDB, Express.js, Vercel

• Website for buying and selling notes among University of Waterloo students using the MERN stack.

TECHNICAL SKILLS AND INTERESTS

Languages: Python, Java, HTML/CSS, JavaScript, SQL, Typescript, GraphQL, Scala, Ruby, Racket, R, C/C++ **Technologies/Frameworks**: React, Angular, Ruby on Rails, Node, PostgreSQL, Kubernetes, Firebase, MongoDB, AWS **Interests**: Chess, Rock Climbing, Hiking, SSBU