

SUMMARY

I am a full stack developer with background in medicine. I have published multiple greenfield React Native apps on the App Store and Google Play Store and lead mobile development at Tochtech Technologies which specializes in IOT solutions for aging adults. In addition, I work with React and CSS/Sass on front-end; with Node/Express/Feathers and Ruby on Rails on back-end; with Jest for unit and integration testing; and with both relational and non-relational databases (namely PostgreSQL and MongoDB). I believe in growth mindset and fostering a positive work environment through sharing knowledge and ideas; maintaining open and respectful communication; and taking initiative and ownership of my work and shared tasks.

EDUCATION

CodeCore Developer Bootcamp

Certificate in Full Stack Web Development 2018

University of Limerick

Bachelor of Medicine & Bachelor of Surgery 2013

University of British Columbia

Bachelor of Science, General Sciences Life Sciences and Earth Sciences 2008

SKILLS

FRONT END: React Native, React, JavaScript, CSS, Sass, HTML5, Material UI, Bootstrap, jQuery, Styled-Components

BACK END: Ruby on Rails, Node.js, Express.js, Feathers, REST APIs, MVC architecture

DATABASE: PostgreSQL, MongoDB, MySQL

DEPLOYMENT: Amazon AWS, Firebase services, Fastlane, App Store, Google Play Store

WORKFLOW: Git, Webpack, Jest, Jira, Unit testing, Crashlytics, Google Analytics

LANGUAGES: JavaScript, Ruby, Python (for data science)

EMPLOYMENT

TOCHTECH TECHNOLOGIES

Software Developer

Surrey, BC
July 2018 to Current

- Full stack developer at IOT startup specializing in technologies that enhance remote care of aging adults so they may live independently with peace of mind for them and their families.
- Lead React Native mobile development for the company's four core products (Sleepsense, Tochie, Vericare and Smarturns) which are available on iOS and android app stores. Upgraded react and react-native versions to latest, introduced react hooks and automated builds to stores.
- Maintain, debug, improve and optimize code base. Create and integrate new features to staging and production. Ensure cross-platform and cross-browser functionality. Tech includes React Native, React, NodeJS, ExpressJS, FeathersJS, MongoDB, Jest, Styled-Components, Firebase services, AWS.
- Educate and evaluate our solutions with pilot users, clients and stakeholders. Collaborate with team to enhance UI/UX and software architecture.
- Actively seek feedback/code reviews with senior developer and colleagues. Mentor and code review with co-op/junior developers.

FREELANCE WEB DEVELOPER & PHYSICIAN CONSULTANT

Self-employed

Vancouver, BC
Feb. 2018 to Current

- Collaborating with patients, designers, patient advocates and healthcare experts to build health app prototypes. Projects include Patient Health Companion App (in collaboration with Fraser Health Authority and Langley Family Medicine division), Caren by CareCrew and Care Circles (now ShareMyCare).
- Typical stack includes Ruby on Rails, PostgreSQL, Sass/CSS, HTML, React, React Native, NodeJS, JavaScript, Firebase services, AWS.
- Duties include problem identification, conducting literature and user research, analyzing findings, proposing/prototyping solutions and full stack development.

UNIVERSITY OF SASKATCHEWAN

Resident Physician

Academic Family Medicine Unit Regina
July 2013 to July 2017

- Provided patient care under supervision assigned by the Resident Director.
- Assisted with admissions, consultations, evaluations, diagnosis and treatments of both clinic and hospital patients.

JACK LEE

FULL STACK DEVELOPER (JAVASCRIPT)

PROJECTS

CARE CIRCLES

May 2018 to June 2018

Helped develop award-winning initiative to empower patients to direct their circle of care alongside family and health professionals. Tech: Node, jQuery, JavaScript, HTML, CSS, Bootstrap. Winner of People's Choice, Infoway Award and Canadian Institute of Health Information Award at Hacking Health eHealth Conference.

SMARTURNS (TOCHTECH)

July 2018 to Current

- React Native, NodeJS, MongoDB, FeathersJS, kafka, cassandra
- Mobile app user can be notified when their loved one's stove is turned on/off or left unattended. App is available on App Store and PlayStore. Smart stove knobs can be purchased through Amazon, BestBuy and local vendors.
- Accomplishments: in-app timer feature, monthly stove usage chart, push notification services (firebase cloud messaging, Getui for Chinese market), polished up app (UI layout and wording), various bug fixes.

PATIENT HEALTH COMPANION APP

May 2019 to Current

Not-for-profit collaboration with Fraser Health Authority, Langley Family Medicine division and Drs. Kendrick Wong, Marylu Loewen and Lisa Wang, work with patient volunteers and designers/researchers to develop web app with goal to improve patient health outcomes. Currently in early/mid-prototyping stage, we consult with patient volunteers through each step of the project/app design. This project is notable for its research-guided approach and adherence to high ethical standards approved by Research Ethics BC.

VERICARE, VERICARE ALERTS AND VERICARE BUSINESS PORTAL (TOCHTECH)

July 2018 to Current

- Vericare and Vericare Alerts: React Native, NodeJS, MongoDB, FeathersJS, kafka, cassandra
- Vericare Business Portal: React, NodeJS, ExpressJS, MongoDB, Mongoose
- Accomplishments: Stabilized previously crash-prone mobile apps, optimized performance on older phones, validated hardware data, and implemented new features including detailed sleep data and resident's recent movements and location. Delivered VericareAlerts (companion app for caregivers to coordinate/respond to Vericare system-generated alerts) to client within two weeks.
- App is available on App Store and Play Store

TOCHIE (TOCHTECH)

July 2018 to Current

- React Native, NodeJS, MongoDB, FeathersJS
- Automates repetitive task of setting up reminders for seniors. Personalize reminders through voice recordings sent to Tochie speaker.
- Accomplishments: Designed, tested and implemented various reminder templates on mobile app. Designed data structure saved to database. Implemented confirmation feature so mobile app user knows when a reminder has been acknowledged by recipient.
- App is available on App Store and Play Store

SLEEPSENSE (TOCHTECH)

Sept. 2019 to Current

- React Native, NodeJS, MongoDB, FeathersJS, kafka, cassandra
- Mobile app designed to help users achieve better sleep. Presents data collected by bed sensor to user along with insights/analysis and educational resources.
- Accomplishments: Delivered first prototype to client with one-month timeline. Researched and developed evidence-based sleep score. Implemented basic sleep journal and sleep goals. End-to-end implementation of night light controls.
- App is available on App Store and Play Store

AWARDS

Hacking Health at eHealth Conference 2018 ·

PEOPLE'S CHOICE AWARD, CANADIAN INSTITUTE OF HEALTH INFORMATION AWARD, AND INFOWAY AWARD

May 2018

Contributor to CareCircles pitched by Michael Bannister and Dr. Andrew Smith. Helped conceptualize real-world implementation of app, design of app and developing prototype app.

Hackathon for Individuals with Complex Health Needs · SECOND PLACE

Oct. 2018

Researched, conceptualized and pitched winning project, CareFreely, at 2-day hackathon given the task to help caregivers of individuals with complex needs navigate the healthcare system.

ACTIVITIES

TENNIS

2000 to Current

Vancouver city championship and BC provincials third place with Magee Secondary School tennis team in 2003. Mixed doubles champions at medical intervarsity tournament in 2012. Munster Cup winner in 2013 with University of Limerick men's tennis team. Runner-up men's 3.5 doubles Lakeshore Tennis Club in 2015.