HEIDI HAN

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SKILLS

Languages: JavaScript, HTML/CSS, C++, Go, Python, Java, Kotlin, Swift, Objective-C
Frameworks & Tools: React, React Native, Vue.js, Node.js, Express.js, , MongoDB, SQLite3, MySQL, Bootstrap

EXPERIENCES

Software Engineering Intern • Avast   May – Aug 2022
- Applied Decentralized Identity Foundation (DIF) standards to TrustBloc Wallet, a web implementation of a verifiable credential holder, to increase interoperability and allow dynamic credential displays using Go
- Architected and implemented changes to Hyperledger Aries regarding credential metadata using Go and integrated changes to Wallet frontend, as well as other UI features, refactoring, and bug fixes using Vue.js

Software Developer Intern • TextNow   Jan – Apr 2022
- Developed calling API used in TextNow mobile applications using C++
- Conducted internal dogfooding and A/B testing using Leanplum to analyze and optimize call flows
- Collaborated with both iOS and Android teams for call-related features using Swift/Objective-C and Java/Kotlin

Software Developer Intern • Arup   May – Aug 2021
- Improved user experience with MassMotion, a 3D crowd simulation software, by adding features and bug fixes to components including UI, SDK, and database using C++, Qt, and SQLite3

Software Infrastructure Intern • Ford Motor Company   Sept – Dec 2020
- Optimized app startup processes using C++ and SQLite3 as part of the Application Lifecycle Manager team
- Performed testing and code maintenance using Google Test and Mock test framework and static code analysis

QA Engineering Intern • Veeva Systems   May – Aug 2019
- Ensured the quality of Network-Integration products through methods such as integration testing, E2E testing, API testing, functional and non-functional testing

PROJECTS

BEXTER (Bex, the Teaching and Engaging Robot)   Sept 2022 – Mar 2023
- Co-founded an educational robot to demonstrate alternative communication methods to non-speaking children by pointing to words on a communication board while displaying and reading a book
- Led software development including design and implementation of the mobile app, backend server, hardware communication, and database integration using React Native, Node.js, MySQL, Amazon S3, and Python
- Winner of the Norman Esch Entrepreneurship Award and the Precision Resource Most Innovative Design Award

Covid Bubble   Sept – Nov 2021
- Developed and deployed a web application that allows the user to visualize their social bubble through a force directed graph using Python, React, Flask, and MongoDB

EDUCATION

BASc, Mechatronics Engineering • University of Waterloo   Sept 2018 – Apr 2023
- Relevant courses: Software Design & Architecture, Algorithm Design & Analysis, Computer Networks, Cooperative & Adaptive Algorithms, Computer Structures & Real-Time Systems (3.7/4.0 GPA, Computing Option)