Ganan Sivagnanenthirarajah

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Skills & Abilities

- **Languages:** Swift, Java, C#, C++, C, Python, HTML, CSS, JavaScript, PHP & PowerShell
- **Technologies:** Jira, Firebase, Git, Postman, OpenCV, Tesseract OCR, Selenium & Embedded Systems

Experience

Technical Product Manager: Mobile *Lifion by ADP – New York City* *Jan. 2021 – Apr. 2021*

- Carried out company vision of a **metadata driven low-code platform** to create HR solutions for ADP clients
- Revamped mobile native search with redesigned **UX** & **ML** driven APIs for more resilient search results
- Worked with stakeholders to add **13 new platform features** & resolve 28 bugs; including global translations
- Increased developer documentation from 15% to 100% & educated stakeholders on platform capabilities

Technical Product Manager: Platform Interfaces *Lifion by ADP – New York City* *June 2020 – Sept. 2020*

- Wrote, groomed & planned **150+ tickets** for Platform Interfaces (API, REST & Data Contracts) exceeding KRs
- Redesigned UI, improved features & added **metrics** for REST Provider; reduced implementation time by 50%
- Collaborated with stakeholders to create product roadmap, OKRs, PRDs & technical user documentation

iOS Mobile Prototype Engineer *Carfax Canada – Waterloo Innovation Lab* *Sept. 2019 – Dec. 2019*

- Prototyped an iOS app in **Swift** that provided real-time & historic insights about a user's car & driving habits
- Implemented key features such as Distracted Driving, Live Maps, Service Records, Trip History & Rewards
- Revamped user data management to improve load times by over 80% using **Firebase** & **Core Data**
- Other technologies: Core Location, Core Motion, Google Maps SDK, Spotify SDK, Alamofire, Heroku & InVision

Software Developer *Nielsen – Markham* *Jan. 2019 – Apr. 2019*

- Created a **multithreaded** app to recognize products in flyers using **OpenCV**, **OCR** & **machine learning**
- Programmed an application to identify a product's origin by reading its label using **Tesseract OCR**

Hardware & Web Developer *City of Toronto Water – Process Control Systems: Networking* *Apr. 2018 – Aug. 2018*

- Designed & implemented a web-based ticketing system for internal forms to increase efficiency by 60%
- Prototyped **wireless relays** to remotely control power to Data Collection Units saving $200 per DCU failure

Projects

Sciatica Nerve Pain Analyzer

Tools Used: DipTrace, Embedded C, I2C, Machine Learning, TI MSP430 LP (Microcontroller) *Jun. 2019*

- Researched chronic sciatica nerve pain management then created a device to aid therapeutic recovery
- Designed a shield for **Texas Instruments MSP430** board after making detailed **schematics** & **PCB layouts**
- Read sensor data through **I2C** then made an **ML** application which alerted users of detrimental motions

2019 University of Toronto Hackathon: Smart Gym Gloves

Tools Used: Arduino, React Native, ESP8266 (Microcontroller), 3D Motion Capture Hardware *Feb. 2019*

- Captured **3D motion**, identified 3 activities (bench-press, flies & curls) & analyzed data on accuracy of form
- Provided live feedback via gloves as information was processed by a microcontroller then sent to the cloud
- Created a mobile **react native app** where users can track progress, improve form & prevent future injuries

Education

University of Waterloo *2017-2022*

- Candidate for Bachelor of Applied Science – BASc, Electrical Engineering