Lichen Ma

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Education

University of Waterloo   *Sept 2016 - May 2021*
Candidate for Bachelor of Applied Science in Computer Engineering

○ Top 25% of Computer Engineering Juniors

Experience

Back End Engineer *Intersect*   *Sept - Dec 2019*
Ruby, Rails, RSpec, Java, Spring, Git, JIRA   *Toronto, ON*

○ Refactored application service layer implementing template metaprogramming and singleton design methods reducing **memory consumption** and **response time by 30%**
○ Optimized room booking workflow data structure and handled integrations with third-party **Nexudus** service

Full-Stack Developer *HubHead*   *Jan - Apr 2019*
Java, Spring, AngularJS, PostgreSQL, Groovy, Git, MVEL   *Markham, ON*

○ Developed a duplicate workflow detection service, eliminating **back-end errors** resulting from user input overlap
○ Added client and server side **data validations** for an Asset Management web service, ensuring compliance with SAP data standards

Wireless LAN Engineer *Extreme Networks*   *Apr - Aug 2018*
JavaScript, Postman, Newman, Bash, SwaggerIO   *Markham, ON*

○ Automated REST API regression testing using Postman workflows, shortening the validation process by **60%**
○ Designed integration tests for all user profile API endpoints, adopted into the project **CI/CD** pipeline

Software Engineer *Toronto Water*   *Sept - Dec 2017*
Python, NumPy, pandas, Microsoft SQL Server   *Toronto, ON*

○ Automated analytics generation using **Python** for data preprocessing and analysis, shortening the process by **80%**
○ Developed a database of company assets using **Microsoft SQL Server**, streamlining the data retrieval process

DevOps Engineer *Toronto Water*   *Jan - Apr 2017*
TCP/IP, Routing/Switching, Cisco CLI   *Toronto, ON*

○ Architected a network design including **IP addressing** and **security architecture** to provide network access to Power Distribution Units located in the company's datacenter

Projects

10Minutes - Android Kotlin Application
Kotlin, Android Studio, Java

○ Developed a countdown timer application designed to control user phone usage inspired by **The Willpower Instinct**
○ Designed the application implementation featuring **preference utility** streak counters, background functionality driven by **intents** and **broadcast receivers**, and push notification support using **Notification Utilities**

Interests

YMCA Youth Basketball Coach   *Oct 2013 - June 2016*

Skills

Technologies	Rails, Spring, NodeJS, Express, AngularJS, React, Git
Languages	Java, JavaScript, Ruby, C, C++, Python, SQL