# **Shengsong Xu**

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# PROFILE

Enthusiasm for technology and desire to build great software demonstrated through a proven record of academic success as a 3<sup>rd</sup> year computer science student.

**Key Skills:** JavaScript | Java | Python | Jupyter Notebook | C | Agile | Git

# **EDUCATION**

### Honors Bachelor of Science, Computer Science

Sep 2019 – Dec 2023 (expected)

University of Toronto Scarborough, Scarborough, Toronto, ON Specialist in Computer Science Co-op

Cumulative GPA: 3.90/4.0

Awards: University of Toronto Entrance Scholarship (\$1500)

#### RELEVANT EXPERIENCE

# **Software Developer**

Jan 2022 – Apr 2022

MediaCat, UTSC Library Digital Scholarship Unit

- Optimized and developed a domain web crawler that allow scalable and fast crawling of news site using Node.js and Python, applied multithreading to increase the crawling speed by 4 times and greatly reduced the number of crawling errors.
- Worked closely with other developers to develop a twitter crawler using Twitter API and a
  python program to analyze and visualize outputs from both crawlers.
- Researched and Resolved Cloud instance out of memory issue when crawling over 1 million URLs by reallocated Cloud Service resources and mounted Linux /tmp folder to a larger partition.

# **PROJECTS**

# **Java Shell Project**

Sep 2020 – Oct 2020

Group Project, UTSC

- Applied Agile method to efficiently organize the project by writing user stories and design the sprint backlog.
- Designed and built a mock shell that maintain and interact with a mock file system using Object-Oriented design patterns such as Singleton and Polymorphism design in Java.
- Effectively cooperated with 3 teammates during the pandemic and received great feedback from other teammates in anonymous peer review.
- Contributed to the maintenance of the shell project by writing Junit tests.

# **Handwriting recognition project**

Feb 2021 – May 2021

Project, UTSC

• Designed and built handwriting recognition program in C that can determine which digit the handwriting image shows by learning from 60k training data.