

Kebing Liu

🏠 3A Data Science at University of Waterloo

📍 336 Batavia Place, Waterloo, ON N2L 3W2

☎ 365-888-5527

✉ k322liu@uwaterloo.ca

🌐 Kebing Liu

🐙 github.com/AEsir777

PROGRAMMING SKILLS

Languages: C++, Python, JavaScript, R, Bash, SQL

Development Technologies: Django, React, Node.JS, MongoDB, AWS, Git, REST API **Machine Learning**

Technologies: TensorFlow, Scikit-Learn, Keras API

WORKING EXPERIENCE

- **Deep Learning Developer** Jan 2023 - Present
Environment and Climate Change Canada - Canadian Ice Service Ottawa, ON
 - Set up **Python** Machine Learning environment using **Miniconda** in both Windows and **Linux**.
 - Designed, implemented the data cleansing pipeline to manipulate Satellite images and improved the efficiency and accuracy of the process of mapping images and SIGRID analysis charts using **Pandas** and **SQLite** library
 - Transformed the images for different projections and retrieved the spatial information using **GDAL** for data preparation.
 - Trained **CNN** model using **TensorFlow Keras API** to predict the ice thickness based on the satellite images
- **Quality Assurance** Sept 2022 - Dec 2022
Tangam System Waterloo, ON
 - Performed manual testing and modified test plans for metrics, UI and **Hangfire** jobs of SODA, a web application that maximizes the optimization for slots, and reported the issues in **GitLab**
 - Automated over 500 test cases using **JavaScript Cypress** framework end-to-end testing upon **jQuery**
 - Assessed database and SQL injection using **SQL3 JS** library and **MS SQL Management Studio**
 - Integrated Cypress tests with **GitLab CI**
- **SAP iXp intern-Quality Engineering Automation Developer** Fall 2021 – Dec 2021
SAP Waterloo, ON
 - Designed the automation quality engineering process for the database migration and CRUD operations of **SAP HANA DB** using **Python Selenium** framework
 - Implemented and optimized automation process for in Windows, Linux and Mac Os and different webdrivers are used for various of browsers
 - Reported flaws to **Jira** to collaborate with colleagues in different teams

PROJECTS

- **Time Expense Management Web Application** Django, React, Bootstrap, MongoDB
 - Built dynamic and responsive headless Frontend using **React** and **Bootstrap**.
 - Implemented **Django REST Framework** as back end to perform CRUD operations for adding items.
 - Integrated **MongoDB** as the database storage for items and receiving API requests to perform database operations.
- **CC3K game** C++ in Linux Env
 - Applied **MVC** and **Oberserver** design patterns to create a Chamber Crawler game with **X11** as view, the game class as Controller over multiple classes as the model.
 - **Decorator** and **inheritance** design patterns were introduced to optimize the code for different races, monsters and treasures.

EDUCATION

Candidate for Bachelor of Mathematics, Data Science, University of Waterloo, Waterloo, Ontario, September

2020 present

Faculty Average: 87.68