

# Donglin Jia

University of Waterloo

Computer Science (4A)

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LinkedIn:

[www.linkedin.com/in/Donglin-Jia](http://www.linkedin.com/in/Donglin-Jia)

GitHub:

<https://github.com/DonglinJia>

Website:

<https://donglinjia.github.io/angular-website>

## Summary of Qualifications

- Intermediate in Angular, Python JWE/JWT, GAN, Autoencoder

- Exposure to TensorFlow, Pytorch, OpenCV, Django, Selenium, React, NodeJS, ReactJS, Postgresql, Docker, Linux, C++, TypeScript,

- Positive attitude, hard-working, enjoy collaborating as well as working independently

- Strong in problem solving, trouble shooting and time management skills

## Education:

- Candidate for Bachelor of Mathematics, Honors Computer Science, University of Waterloo, ON, September 2017 – present

- Relevant coursework: Artificial Intelligence, Algorithm Designed, Operating System, Optimization, OOP

## Awards:

- 2017 Euclid Mathematic Contest – Scored in the top 1.3% worldwide

- 2017 University of Waterloo Math Faculty Scholarship

## Experience:

### **Machine Learning Engineer, Sugon | Qingdao, China | January 2021 – April 2022**

- Lead DNA encoder project, coin detection project, and 2D image reconstruction project
- Applied GAN and Autoencoder for DNA encoder project. The well-trained model is able to generate DNA sequences with 98% accuracy and reconstructed images with loss of less than 5%
- Implemented and refined neural networks (written by Pytorch). Used CUDA and GPU for training acceleration
- Applied OpenCV for coin detection project. Applied ODM for 2D image reconstruction.
- Used Docker and conda for different environment settings

### **Software Engineer Intern, Bank of Nova Scotia | Waterloo, Canada | September 2020 – December 2020**

- Worked with senior production team to provide customer production level application
- Applied JWE and AES encryption algorithm to encrypted incoming data; Implemented JWT for digital signature and verification by using Node.js/express.js
- Lead, designed and implemented frontend layout using ReactJS
- Successfully resolved Cycle Dependency issues; Managed to finish address auto complete task by using Google Maps API in React side
- Maintained test coverage by using Jest and Chai

### **Innovation Engineer, Bank of Nova Scotia | Waterloo, Canada | September 2019 – April 2020**

- Worked with senior backend and frontend software engineers along with experienced UX design group; Implemented and developed internal platform for Capital Market
- Applied Angular8 with various libraries (e.g. chart.js, ag-grid) to implement frontend features and generate servers; Using Redux for frontend states management
- Communicated with stakeholders, Data Science group and UX design group to build features from scratch and finalize project
- Managed backend by using Django and Postgresql, including building new endpoints, reorganizing backend data structure and modifying database
- Successfully connected to various outside endpoints in Django side and overcame proxy issues

### **Technical Systems Analyst, Royal Bank of Canada | Toronto, Canada | September 2018 – December 2018**

- Worked in a group of 12 developers in RBC Capital Markets Technology
- Optimized existing testing framework and successfully accelerated testing speed by 17%; Resolved lasting Dependency issues; Designed and developed testing framework by using Selenium and Cucumber for offspring trading applications
- Communicated and worked with various groups to resolve unexpected issues

## Relevant Projects:

### **MyBrary | NodeJS, CSS, MongoDB**

- Be able to upload images for creating new books; Capable for editing and deleting existing books; Connected to MongoDB for data management

### **Personal Website | Angular, Django REST**

- Developed personal website for study purpose, daily planning
- Listed partial knowledge, self-learning contents, personal thoughts and understanding for academic concepts