

ZIJIANG YAN

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EDUCATION

Honours Bachelor of Science: Double Major in Computer Science & Statistics 2016-2021

York University - Toronto, Canada

PROFESSIONAL & INTERNSHIP EXPERIENCE

DevOps Engineer, 10/2021 to Current

Bell Media – Toronto, Canada

- Participate in Continuous Integration Continuous Delivery (CI/CD) cycle based on Gitlab, Jenkins, OpenShift, jFrog, AWS.
- Improve the deployment process and build the automation deployment system based on Jira and Gitlab.
- Solely work on Dependency-track platform to detect the dependency risk and alarming through Slack.
- Automate provisioning and configuration of environments using infrastructure-as-code techniques
- Improve the Content Delivery through Adobe Experience Manager (AEM).

Machine Learning Researcher, 03/2021 to Current

Lassonde School of Engineering - York University – Toronto, Canada

- Solely simulate Intelligent Driver model in Matlab.
- Implementing Q-learning, Deep Q learning and Double Deep Q learning algorithm for the system model.
- Implement Reinforcement learning to improve telecommunication quality and reduce the transmission latency as well as improve the traffic flow efficiency.
- Contribute higher availability based on Markov Decision Process ensure load balancing across the network.

Software Engineering Intern, 05/2021 to 08/2021

Bell Canada – Toronto, Canada

- Participated in the implementation of assurance service system in Network Department.
- Create a Data flow system with Python and Kafka. Maintaining a SSH database, Network system, and picking-packing system with MySQL.
- Develop Fault detection algorithm to handle error and validate data.

Peer Tutor, 08/2017 to 6/2021

Bethune College – York University – Toronto, Canada

- Tutored more than 1000 students within various levels of education regarding STEM subjects such as Computer Science, Mathematics, Statistics and Information Technology.
- Actively tutored students on utilizing data analysis tools including SAS, R and Java to effectively assist students with completing analytically focused academic projects
- Communicated frequently with parents, students, and faculty to provide feedback and discuss instructional strategies

RELEVANT PROJECTS

Reinforcement Learning for Joint V2I Network Selection and Autonomous Driving Policies (GlobeCom2022 submitted)

- Develop a RL-based framework to jointly optimize network selection and autonomous driving policies in multi-band VNets to (i) maximize the traffic flow and minimize collisions, and (ii) maximize the data rates and minimize handoffs by controlling the AV's motion dynamics and network selection.

Predicting Income Potential by Building Classifiers | Pytorch & PostgreSQL, 11/2020 to 02/2021

- Implement KNN algorithm to classify income data
- Implement deep Neural Network to improve the pattern matching performance.
- Visualized project data on Github to display and analyze correlations

North Pole Countries Database | Java IDE & PostgreSQL, 06/2021 to 08/2021

- Developed interactive database application utilizing Swing as frontend
- Implemented and established database environment employing technical proficiency in Linux and Windows

SKILLS

- **Programming Languages** | Java, Python, C/C++, SQL (Postgres), JavaScript, HTML5, R, SAS, Stata, MATLAB
- **Developer Tools** | Git, Docker, TravisCI, Google Cloud Platform, AWS, Visual Studio, PyCharm, IntelliJ, Eclipse, Android Studio, Jupyter Notebook, Markdown & Minitab
- **Libraries** | Tensorflow, Pytorch, pandas, NumPy, Matplotlib
- **Hardware** | Embedded Systems STM32 & Robotics
- **Interpersonal Qualities** | Networking, Communication, Leadership & Presentation
- **Languages** | Mandarin & English