



Shan Xue

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Education

Master of Engineering in
Electrical and Computer
Engineering (ECE), University of
Waterloo, CA, 2024

Bachelor in Computer Science,
Honours with Co-op, Dalhousie
University (Halifax), CA, 2019

Digital Credentials

IBM Certified Advocate - Cloud
v1 - 2022

Cloud Core - 2022

IBM Cloud Essentials - 2022

AWS Certified Cloud Practitioner
- 2021

Certified SAFe® 5 Scrum Master
- 2020

IBM Automation: Compass -
2020

IBM Agile Explorer - 2020

Applied Data Science with
Python - Level 2 - 2020

Python for Data Science - 2020

Data Science Foundations -
Level 2 (V2) - 2020

Profile

- 8+ years programming experience with Python, Java, C/C++.
- Strong CS fundamentals, especially in data structures, algorithms and object oriented programming principles.
- Familiar with RESTful APIs, authentication and authorization mechanisms.
- Experience with various database technologies, such as PostgreSQL, MySQL, MongoDB and IBM DB2.
- Hands-on experience in all phases of Agile software development life cycle and continuous integration.
- Hands-on experience in manual and automated testing.
- Ability to work independently and work in a team environment.
- Strong written and oral communication skills.
- Strong ability to understand business requirements and translate them into technical requirements.
- Strong execution skills with the ability to work efficiently under pressure deliver quality results within standards and meet deadlines.

Key skills

- AWS Cloud Practitioner Certification from AWS on 2021-04-28 (expires 2024-04-27)
- Programming languages: Java, Python, Javascript, C/C++, Shell Script
 - Databases: PostgreSQL, MySQL, IBM DB2, MongoDB
 - Tools: Docker, Tableau, IBM Cognos, Vim, Github, Jupyter
 - Operating Systems: Ubuntu, MacOS, Windows
 - Cloud computing: AWS(S3, EC2, Lambda), Microsoft Azure
 - Software: Android Studio
 - Web development: React, HTML, CSS, Django

Key courses and training

- Cloud Computing
- Data Mining and Data Warehousing
- The process of data science
- Web Intelligent
- Algorithms

Work experience

Junior Web developer

The Chronicle Herald, Canada | Jan 2019 - Apr 2019

- Technical Stack: Python, Django, Restful API, Git, Agile
- Worked closely with the product owner to gather and understand the business



Languages

English - Fluent

Chinese (Simplified) - Fluent

French - Basic

and functional requirements.

- Designed and developed the backend Restful API based on Django framework.
- Implemented unit and integration test suites for better assessing product functionality and performance.
- Worked in close cooperation with project managers and other functional team members to form a team effort in development.
- Utilized pair programming approach to ensure high quality code.
- Wrote high quality technical documentations for better code maintenance and internal training.

Junior Data Analyst

The Chronicle Herald, Canada | Sept 2018 - Dec 2018

- Technical Stack: MySQL, Oracle, Python, Git
- Improved existing ETL processes and did performance tuning to fix bugs.
- Developed new ETL Pipelines that extract data from various data sources, transform data and prepare data for analytical purpose.
- Generated actionable insights using extracted and transformed data.
- Utilized Cron jobs to automate data file tracking.

Junior Web developer

SimplyCast, Canada | Apr 2017 - Aug 2017

- Technical Stack: Javascript, PHP, HTML, CSS, Git, Agile
- Learned the agile model of software development processes and took ownership of all coding, testing and collaboration.
- Tested software to ensure functionality and adherence to plan objectives and management expectations.
- Contributed to the team's solutions in order to finish stories and meet goals to exceed client expectations.

Assignment history

Full Stack Developer

Northern Trust, Canada | Mar 2020 - Sept 2022

Project name: EED/E2D (NT Matrix project)

- Implemented back-end rule engine to build solutions for different types of banking business complications.
 - Managed and developed RESTful APIs containing swagger-based interface for more than 8 services throughout duration of project.
 - Applied Redux Middleware in web application to retrieve data and integrate between server and client sides.
 - Led API lifecycle development, managing software development while ensuring functionality of code.
 - Gained extensive knowledge in software such as Java Spring Boot, Kubernetes, Netflix Zuul, React and Redux.
- Contribution:
- Redesigned the prioritization engine service
 - Improved the Mark Logic database queries effectively to speed up the querying performance.



- Take challenging tasks and help team on contract testing and defect resolution in every agile sprint.

Full Stack Developer

Northern Trust, Canada | Oct 2019 - Mar 2020

Project name: Fund Utility (NT Matrix project)

- Implement Rule Validation: Created and implemented 500+ business rules for backend that help validating the functionality of the system, by using MVEL expression language that based on Java-syntax.

- NT Fund Utility UI: detected and improved defective codes on existing platform by using Javascript, React, Redux.

Contribution: - Implemented the prioritization engine service in the project.

- Created and implemented 500+ business rules to help validating the functionality of the system.