UBC, 2329 West Mall
Vancouver, BC V6T 1Z4

Junrui Wang

GitHub: Submergence2000
wang.junrui@outlook.com

Education

Computer Science, BSc **Nanjing University, China** **2018.9-2022.6**

- Selected for Elite Program, undergraduate thesis is about clustering RDF datasets

Data Science, MSc **UBC, Canada** **2022.9-present**

- Focus on data science and computational linguistics

Work Experience

Professional Services Intern **Amazon Web Service(AWS)** **2021.7-2021.10**

Provided solutions and consultation to clients with project and demos

Import/Export Policy Enquiry Website (For Amazon Seller Central)

- Implemented a data validator with the help of JSON Schema, which helped our customers achieve a value-level verification in seconds for 10,000+ JSON items in Python Blog In Chinese
- Reduced nearly 60%(14s→6s) cold start time of the Java AWS Lambda function in our project by using a combination of four methods, which optimise the user experience while saving our clients budget

Text analytics based model for product search

- A model can make products embedded, based on Word2Vec and Amazon Review Data from UCSD
- Achieved a mean rho of 0.62 in WS-353 and can find both similarity and relatedness between products

Serverless flash sale system

- Developed a system based on .NET core and Redis, which could take 500+ parallel requests per second on a single node with response time less than 3 seconds (under JMeter)
- Achieved lock-free by using twice stock confirmation with less than 1% data competition in test environment

Technical Experience & Projects

Co-clustering on RDF Data (2021.10-2022.05)

- Contributed to a thesis submitted to The Web Conference 2023 as the secondary author
- Implemented an Multi-veiw Information-Theoretic Co-Clustering on RDF datasets
- Presented a visual demonstration of the core relationships on Semantic Web

Musicians Impact Analysis (2021.1-2021.2)

- Meritorious Winner, Mathematical Contest in Modeling, 2021 (top 8% worldwide)
- Implemented a PageRank algorithm with weighted cascade teleport to quantify the influence propagation
- Verified whether one musician did influence another by SVM and Hypothesis Test

Technical Skills:

- Python, C++/C and Java, have experience in R and .NET core development
- Basic Machine Learning algorithms, have experience in Pytorch, scikit-learn, and Knowledge Graph
- Computer network common protocols, have experience in crawlers and web analysis tools
- Linux systems, have experience of using several Linux distributions on different architectures

Leadership & Campus Activities:

Worked for the Nanjing University Microsoft Student Club (NJUMSC) and been elected as the vice president for excellent activity organisation and communication skills. Photo with club mates

- **Microsoft Summer Camp** Completed an instant APP of a fitness performance visualization forecasting and made a presentation to researchers at Microsoft Research Asia
- **Hackathon2020@East China** Helped with statistics, analysis and visualisation of team data and project data. Planned and coordinated the whole hackathon (Official website in Chinese)