Rongpeng Li (Ron)

Contact Information

Email LinkedIn GitHub

Address

400 S Catalina Street, 409 Los Angeles, 90020

Education

Master of Arts (all-but-dissertation PhD candidate), Physics University of Southern California, Los Angeles

December, 2019

Master of Science. Electrical Engineering University of Southern California, Los Angeles

December, 2019

Bachelor of Science, Physics

South University of Science and Technology of China, Shenzhen

May, 2015

Full-time Professional Experiences

Galvanize, Inc.

September, 2020 - Present

Remote

Senior Data Scientist, Data Science Instructor

- Taught Galvanize's Data Science Immersive (DSI) program at Los Angeles campus. Achieved 100 net promotion score (NPS) for 3 consecutive surveys (the goal is 75). Researched and established new teaching modules like teach-back, pair coding and parallel assignment solving.
- Built curriculum materials including lecture slides, assignments, case studies and capstone projects. Took initiative to upgrade and revamp outdated resources by integrating up-to-date industry practices. Coordinated the creation, review and merge of 100+pull requests under time constraints.
- Voluntarily provide mentoring to more than 5 students to directly land jobs. Proposed and hosted the alumni mock interview program on Galvanize YouTube channel.

Information Sciences Institute

February, 2020 – September, 2020

Research Programmer

- Marina Del Rey, California & Remote • Designed software architectures and data schema for DARPA-funded research projects. Communicated
- daily with researchers to collect research needs and feedback. Reviewed and chose technology stacks to fulfill researchers' requests. Built back-end APIs with Flask and front-end UIs with Vue for managers and external stakeholders to interact with data with high permission granularity. • Managed the development and deployment of an automated, real-time evaluation and scoring system for
- research publications. Built customized APIs for parsing, indexing and transforming 1 million+ records of Microsoft Academic Graph data using Elasticsearch and Flask. Created modules to automatically generate explanations for publication credibility scores. Coordinated model builders to adhere to existing docs, design principles and coding styles.

Internship Experiences

Quantlab

May, 2018 – August, 2018

Quantitative Research Programmer

Houston, Texas

 Wrote a Python package to manage terabytes of high frequency trading data distributed across servers. Engineered trading signal features, designed and trained machine learning models to catch trading signals and opportunities, evaluated model performances with real-time market data.

Research Programmer

Los Angeles, California

• Established connections between a server running R and Tableau to extend the capability of Tableau. Wrote example-based documents for the whole team to use without hassle. Reorganized and documented institutional data, detected intrinsic mislabeling in raw data and helped other teammates avoid potential pitfalls.

Skills

- Professional and robust Python, decent JavaScript, SQL, R and Dart.
- Deep knowledge in frameworks and tools including scikit-learn, tensorflow, Flask, React, Vue, Elasticsearch, Kafka and Spark. Working experience with AWS services like EC2, S3, RDS, CloudWatch, ALB, Kinesis, etc. Experience with CI/CD tools and platforms like GitHub actions, etc.
- Strong business-oriented engineering principles. Rich experience of managing the whole life-cycle of software engineering and data science projects. Practical experience with Agile, Scrum and Kanban development process/workflows.
- Deep knowledge in probability, statistics, statistical machine learning, deep learning and statistical testing in business setting.

Publications & Talks & Projects

• KGTK: A Toolkit for Large Knowledge Graph Manipulation and Analysis Publication

• A Deep Dive into DNA Base Pairing Interactions Under Water Publication

• Anisotropic Elasticity and Abnormal Poisson's Ratios in Super-hard Materials Publication

 Domain-Specific Compilers for Dynamic Simulations of Quantum Materials on Quantum Computers Publication

• COVID-19 Visualizations, the Good, the Bad and the Malicious

PyData talk

• Coursine, A Course Recommendation Engine

Machine Learning Project

Apodidae iOS Application

• Trumptron, a TTS synthesis engine for Trump's voice.

Not Released

Notable Authorship

• Essential Statistics for Non-STEM Data Analysts

4.3/5 Rating Book Blog

 $\bullet\,$ The Unique Advantages of Non-STEM Professionals in Tech Bootcamps

Webinar

Simulating an order book with Kafka and Streamlit
Advanced Python Programming Book with Manning Publication

WIP

• Scientific Simulation Book with Apress Publication

WIP

Voluntary Services

- Mentored students outside of my cohort to help them land jobs. Check out my students' recommendation on LinkedIn
- Mentored the Coursera specialization Mastering Software Development in R
- Hosted a free, 2-month data science workshop at Palms-Rancho Park public library in Los Angeles
- Served as a voluntary tutor for homeless kids at School on Wheels
- Built and maintained a website for an Airbnb host in northern Arizona.