# ZIJIE ZHANG RESUME

Intention: Research, Machine Learning

Status: M.A. in Mathematics, Postgraduate

Fields: Machine Learning, Computational mathematics, Data Science

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#### **EDUCATION**

**Graduated as M.A. in Mathematics** - University of Wisconsin–Madison

SEP 2019 - MAY 2021

- · Interest in Computational mathematics, Data Science, Machine Learning and Stochastic Analysis
- · GPA: 3.88/4.0

**Semester Abroad** - University of Wisconsin–Madison

SEP 2019 - MAY 2020

- · Interest in Applied mathematics and Statistical Learning
- · GPA: 3.375/4.0

**Graduated as B.S. in Statistics** - Nanjing University

SEP 2016 - MAY 2020

· GPA.Cumulative: 3.95/5 · GPA.Major: 3.91/5

### RESEARCH

## NANJING UNIVERSITY FINANCIAL INNOVATION LAB - Nanjing, JS, China

Sep 2018 - Dec 2018

- · This is a research experience about Algorithm design in Blockchain topic.
- · Designed a conjugated routing and account balancing algorithm for high-speed transaction as a team member, and articulated a paper.
- · Implemented simulation and numerical optimization with MATLAB on Tianhe HPC, making success rate over 90%.
- · A paper produced by this project (including me), "Photon State-Channel Architecture with AI Routing Optimization", has been accepted by the 2018 CCF Blockchain conference.

# INTERDISCIPLINARY CONTEST IN MODELING - Nanjing, JS, China

Feb 2018

- · Designed a model to decide the number, distribution and timeline of Tesla destination charging and supercharging stations.
- · Use the Queuing Model to figure out the relationship between the expected waiting time and arrival rate.
- $\cdot$  A Linear Regression Model was used to predict the number of electric vehicles.
- · A paper produced by this project was awarded the Honorable Mention in ICM.

### **EXPERIENCE**

# **TRANSLATOR** - University of Wisconsin-Madison

NOV 2019

- · Provide interpretation services for Nanjing University delegation.
- $\cdot$  Participated and interpreted the biomedical cancer detection technology exchange meeting with Exact Sciences.
- · Accompanied to visit Discovery Building, Research institute in Madison, Wisconsin.

# **COURSEWORK HIGHLIGHTS**

**Mathematics** Real Analysis • Complex Analysis • Functional Analysis Methods of Applied Mathematics I & II • Methods of Computational Mathematics I & II Operations Research • Modern Algebra • Topics in Applied Math

**Statistics** Statistical Learning • Stochastic Processe • Mathematical Statistics Multivariate Statistical Analysis • Time Series Analysis • Risk Statistics

**Computer Science** Pattern Recognition • Data Mining • Machine Learning

# **SKILLS**

## **PROGRAMMING**

Python • Matlab • C • C++ • LATEX R • Shell • Fortran(w/mpi) • Octave Familiar: Java • Assembly • MySQL

# **SPOKEN & WRITTEN**

Fluent: English Native: Chinese