# CAI, Zeyuan

**Education Background** 

**Undergraduate: Lanzhou University** 

09/2015-07/2019

Major: Mathematics and Applied Mathematics GPA: 4.12/5.0 Rank: 5/68

Core Courses: Mathematical Analysis, Advanced Algebra, Probability Theory, Mathematical Modeling, Mathematical Statistics, Stochastic Process, Numerical Analysis, Real Analysis, Functional Analysis, etc.

**Summer Exchange: University of California, Los Angeles** 

08/2018-09/2018

**GPA**: 4.0/4.0 **Major**: Statistics

**Graduate: Georgia Tech** 

08/2019-12/2019

**Expected GPA**: 4.0/4.0 **Major**: Statistics in ISyE

Courses of Interest: Theoretical Statistics, Stochastic Process, Simulation, Optimization, etc.

# **Basic Research Experiences**

## **Dimensionality Reduction and Application Based on Mutual Information**

08/2017-12/2017

- Acknowledged the data processing and application of high-dimensional data, learned methods of pre-processing and reduction analysis on high-dimensional data;
- Established relevant models, tested models with related data, analyzed their advantages, optimized algorithm.

#### The Differential Expressions of Logistic Growth Model

05/2017-07/2017

- Demonstrated the logistic law of Model of Preventing Increasement in differential form by differential equation;
- Wrote algorithms, discussed the equilibrium point and stability of the equation, conducted numerical modeling.

### C++ Implementation of Numerical Algorithm for Linear Equations

03/2016-06/2016

- Used C++ algorithm design function to program the Gaussian Elimination Method and Jacobi Iterative Method;
- Solved the linear system of equations, improved the algorithm, reduced the errors.

#### **Internship Experiences**

### Seeiner Technology Co., Ltd, Hangzhou, China Assistant Analyst

07/2018-08/2018

- Analyzed and dig data, established models, conducted in-depth analysis based on customers' requirements;
- Wrote analysis reports, found out the implicit questions, changes and influence;
- Provided feasibility system solutions, cooperated with other teams to promote the research projects.

#### Competence

Main AwardsOutstanding Graduates of Lanzhou University2019First Class Scholarship for Excellent Student2017-2018

**Computer** C++; Matlab; R; Python; SQL