

CAI, Zeyuan

Education Background

Undergraduate: Lanzhou University	09/2015-07/2019
Major: Mathematics and Applied Mathematics	Rank: 5%
Core Courses: <i>Mathematical Analysis, Advanced Algebra, Probability Theory, Differential geometry, Mathematical Statistics, Stochastic Process, Numerical Analysis, Real Analysis, Functional Analysis, etc.</i>	
Summer Exchange: University of California, Los Angeles	07/2018-09/2018
GPA: 4.0/4.0 Major: Statistics	
Graduate: Georgia Tech	08/2019-12/2020
GPA: 4.0/4.0 Major: Statistics in ISyE	
Core Courses: <i>Theoretical Statistics, Design of Experiment, Regression Analysis, Computational Statistics.</i>	

Basic Research Experiences

Detection of Abnormalities in Mammogram Based on Deep Learning	02/2020-04/2020
<ul style="list-style-type: none">Preprocessed the raw data and transform the original dataset into usable one, extracted regions of interest.Modified the CNN architectures and did training and validation on VGG-19/VGG-16 models separately.Compared the performance of the two models and made the conclusion.	
Dimensionality Reduction and Application Based on Mutual Information	08/2017-12/2017
<ul style="list-style-type: none">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	05/2016-07/2016
<ul style="list-style-type: none">Demonstrated the logistic law of Model of Preventing Increase in differential form by differential equation;Wrote algorithms, discussed the equilibrium point and stability of the equation, conducted numerical modeling.	

Internship Experiences

Seeiner Technology Co., Ltd, Hangzhou, China <i>Assistant Analyst</i>	07/2018-08/2018
<ul style="list-style-type: none">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 Awards	Outstanding Graduates of Lanzhou University	2019
	First Class Scholarship	2017-2018
Computer	C++; Matlab; R; Python; LaTeX	