Yunjun Xia

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EDUCATION

Columbia University, Columbia Engineering, New York, NY **Expected Dec. 2020**
Master of Science in Data Science
Coursework: Computer Systems for Data Science; Machine Learning; Algorithms for Data Science; Exploratory Data Analysis & Visualization; Statistical Inference & Modeling.

University of California San Diego, Revelle College, La Jolla, CA **Mar. 2019**
Bachelor of Science in Probabilities & Statistics with Minor in Economics (GPA: 3.831/4.0)
Coursework: Mathematical Statistics; Computational Statistics; Stochastic Processes; Probability; Combinatorics; Bootstrap Analysis; Linear Algebra; Real Analysis; Actuarial Mathematics; Mathematics of Finance; Differential Equations; Microeconomics; Macroeconomics; Econometrics; Decisions Under Uncertainty
Honors: Provost Honor in Freshman year, Fall 2016, Winter 2017, Winter 2018, Spring 2018

PROFESSIONAL EXPERIENCE

China Everbright Bank, Chengdu, China **Aug. 2017 – Sep. 2017**
*Internship, **Electronic Banking Department, Chengdu Branch***
- Collected and published 30+ articles about the branch's main products in season on the online platform of WeChat Official Account for more than 100+ thousand official account followers, which increased the page reading from 200 to 800 averagely.
- Signed QR Code payment agreements with 30+ business owners;
- Classified and analyzed the information of business owners which signed the payment agreement with the branch.

PROJECT EXPERIENCE

R project: Bootstrap functions on data analysis **Spring 2018**
Individual Project, **UCSD**
- Tested the mean of data samples with known variance through Bootstrap method;
- Computed the bootstrap pivotal confidence interval for the mean of data samples;
- Constructed the bootstrap studentized pivotal confidence interval for the mean of data samples.

R language application on statistics **Spring 2018**
Individual Project, **UCSD**
- Processed data samples where bootstrap failed; made plots of empirical distribution functions;
- Conducted Meta-Analysis for data samples to deduce useful consequences; Applied *Fisher exact test*, *Kolmogorov-Smirnov test* and *Liptak-Stouffer tes*t for p-values;
- Fitted Polynomial Model to the dataset **steam** in the **MASS** package in R.

Matlab Application and numerical analysis **Fall 2018**
Individual Project, **UCSD**
- Conducted the functions of Power Method & Inverse Method & Shift-Invert Method to approximate eigenvalues and eigenvectors;
- Produced and tested the functions of LU decomposition and Cholesky Decomposition for square matrices;
- Performed Forward/Backward Substitution for Lower/Upper triangular matrices.

Java application **Winter 2018**
Project Leader, **UCSD**
- Built up a math game 2048 based on Java; Wrote and implemented 2048 backend using Vim editor; Constructed 2048 GUI for the fully functioning graphical 2048 game;
- Created a Critters Battle game using Java Simulator, in which each kind of critter fighting randomly was given original fighting abilities setting and the critter family had the inheritance of some abilities.

Excel project: Option Pricing in Binomial Model **Winter 2018**
Individual Project, **UCSD**
- Found the arbitrage free price on Feb 28, 2018 for a European call option of Apple stock, with a strike price of $185 and an expiration of March 16, 2018 based on a binomial model using Excel spreadsheet program.

SKILLS & HOBBIES

- Program language: R, Matlab, Java, Excel, Stata, Python.
- Hobbies: League of Legends (ranked Diamond IV); Baking; Cooking.