ZHENG ZHANG

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EDUCATION

The Pennsylvania State University   *Aug 2016 - Dec 2020*
B.S. in Statistics & Data Sciences
Concentration: Computational Statistics, Statistical Modeling Data Sciences
Minor in Computer Science & Mathematics

Member of Mu Sigma Rho - National Honorary Society for Statistics
Overall GPA: 3.71/4.00

HONORS AND AWARDS

ECoS Summer Undergraduate Research Scholarship   April 2019
Scholarship for Conducting Research During Summer   *State College, PA*

DataFest   April 2019
Finalists & Best Visualization Award   *State College, PA*

HackPSU   October 2018
Second Place in AccuWeather Challenge   *State College, PA*

Penn State Behrend Honor Student   April 2018
Honor Student Award   *Erie, PA*

RESEARCH EXPERIENCE

Research Assistant   Aug 2019 - Present
The Mahony Lab, Center for Eukaryotic Gene Regulation   *State College, PA*

· Developed algorithms and model for predicting the signal of biochemical activities in human genome.
· Utilized Spark and HDFS to provide the solutions for handling over 4 TBs massive datasets.
· Developed parallel applications for data pre-processing and post-processing.
· Link to Research: https://secantzhang.github.io/project/encode-imputation

Bioinformatics Programmer   May 2019 - Aug 2019
The Mahony Lab, Center for Eukaryotic Gene Regulation   *State College, PA*

· Participated in the "Encode Imputation" challenge hosted by Stanford University.
· Developed high-performance parallel algorithms and the data processing pipeline to model the massive datasets.

PROFESSIONAL EXPERIENCE

Teaching Assistant   Jan 2020 - Present
CMPSC 442 - Artificial Intelligence   *State College, PA*

· Assisted Dr. Kelvin Kamali with the grading of the student's homeworks in CMPSC 442 class.

Teaching Assistant   Aug 2019 - Dec 2019
CMPSC 410 - Programming Model for Big Data   *State College, PA*

· Assisted Dr. Daniel Kifer with the grading of the students' homeworks and labs in CMPSC 410 class.

Entry Analyst Intern   Jun 2017 - Sep 2017

Beijing JAYA Technology   *Beijing, China*

· Crawled and collected the public-available financial data published on over five companies' annual report.
· Visualized and analyzed the data extensively using R and Python.

PROJECTS

rmodel2tex   Dec 2018 - Present

R   *State College, PA*

· R package for easily converting various existing r model to latex code.
· Supported various statistical models such as linear regression and logistic regression.
· Took into consideration of the difference between population model and fitted model. Also supported the different representation of interaction and categorical terms.
· Link to Project: https://secantzhang.github.io/project/rmodel2tex

A-weatheR   Oct 2018

Swift   *State College, PA*

· Developed an AR iOS application using AccuWeather API on HackPSU Fall 2018.
· Integrated Augmented Reality within the application so that the disables could sense the weather condition visually without the need of going outside.
· Link to Project: https://secantzhang.github.io/project/a-weather

TECHNICAL STRENGTHS

Computer Languages	Python, R, Scala, Swift, C++, JAVA, SAS, Shell Script
Databases	MySQL, MongoDB
Data Analysis & Processing	Spark, Hadoop, HDFS, Scikit-Learn, ggplot, Tidyverse, HDF5

COURSEWORK

CMPSC 442	Fall 2019	**CMPSC 410**	Spring 2019
Artificial Intelligence	A-	*Programming Models for Big Data*	A
CMPEN 454	Fall 2019	**STAT 440**	Spring 2019
Computer Vision	A	*Computational Statistics*	A
CMPSC 465	Summer 2019	**STAT 462**	Fall 2018
Data Structures and Algorithms	A	*Applied Regression Analysis*	A-