

Reed Zhang

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EDUCATION

Undergraduate: B.S. Statistics and Machine Learning, Carnegie Mellon University (Pittsburgh, PA), May 2020 (Current QPA: 4.0/4.0)

High School: Thomas Jefferson High School for Science and Technology (Alexandria, VA), June 2016 (Weighted GPA: 4.493)

Participated in Math Team, Computer Team, North American Computational Linguistics Olympiad, EconChallenge. Awarded National AP Scholar, AP Scholar with Distinction.

RELEVANT

Intern: Question.ai (San Francisco, CA), 2017

EXPERIENCE

Scraped and cleaned data, implemented machine learning (TensorFlow neural networks and FastText models) on AWS backend to improve text classification systems at a SF startup. Raised chatbot emotion-reading accuracy from 50 to 61 percent.

Research Intern: George Mason University Sci. & Tech. Campus (Manassas, VA), 2016

Worked on analysis and visualization for several Bioinformatics datasets using R and python.

Mathnasium Instructor: Mathnasium of Gainesville (Gainesville, VA), 2015–2016

Collaborated with other instructors to teach mathematics to K-12 students. Attended weekly sessions with other instructors and groups of ~10 students, as well as meetings with other instructors and center director.

PROJECTS

Frost (web page), HackCMU, 2016

Built financial data visualization website with team for hackathon project. Used JavaScript and D3 library to create aesthetic pie charts. Won the Best DataHack award at HackCMU 2016.

Two New Statistical Potentials for Protein Structure Model Quality Assessment, 2015

Analyzed protein structure data in R. Established statistical methodology that distinguished between native structures and computer generated models with 94.6% accuracy. Presented project at research symposium.

Using Machine Learning to Predict Survival in Liver Cancer Patients from Gene Expression Data, 2014

Obtained data from NCBI's Gene Expression Omnibus. Preprocessed data in Excel and built machine learning models in Weka. Obtained 70-80% prediction accuracy using only gene expression data. Presented project at research symposium.

AWARDS

HackCMU 2016: Best DataHack presented by Yahoo!, built a data visualization website w/ team

CMU Tartan Data Science Cup: Top 10 finalist out of 70 teams in predictive modelling w/ grocery data (2016). Top 8 finalist out of 40 teams in predicting loan repayment (2017).

American Invitational Mathematics Examination: Three-time invitee (2014, 2015, 2016)

American Regions Mathematics League: High Team Honors with 3rd place, B division (2015)

Rho Psi Science and Technology Research Scholarship: 2nd place (2015), 2nd place (2016)

SKILLS

Programming: Python, R, C, Java, HTML/CSS/Javascript, SQL

Other: Unix, Git, MS Office Suite, Weka