CRYSTAL QIAN

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WORK

Google, 2017 -
Software Engineer
Responsible for full-stack development on Google Cloud Platform's big data orchestration solution: Cloud Composer; expanding Google's open-source presence through contributions to Apache Airflow.

Microsoft, 2016
Software Development Intern
Designed and implemented view component tag helpers for the open-source ASP.NET Core web framework on the MVC (Model View Controller) team. Demo here.

Comcast, 2015
Software Development Intern
Developed the initial GoTO prototype (an AngularJS/ Golang web API with SQL backend) for open-source Apache Traffic Control (formerly Comcast Traffic Ops/Server data management system).

SKILLS

Proficient in
Angular2, Bash, C#, Git, Java, Python, Typescript

Working knowledge of
JavaScript, MySQL, Golang, C, C++
jQuery, p5.js, d3js, OpenGL

AFFILIATIONS

Princeton University, *Admissions Interviewer*
Refugee Transitions, *Refugee Teacher*
Second Harvest Food Bank,
Senior Center Volunteer
SIGGRAPH 2017, *Technical Papers Trailer*
Reviewer and *Student Volunteer*
Stanford oStem Program, *Industry Mentor*
National Center for Women, Information Technology,
2013 National Aspirations in Computing Winner

HackPrinceton (2015, 2016, 2017),
HackMIT (2015), Stanford Treehacks (2016)

EDUCATION

Princeton University, 2017
Computer Science B.S.E.
Visual Arts Minor
Summa Cum Laude
Jim Seawright Award in Visual Arts

Carnegie Mellon University, 2012
Advanced Placement, Early Action Pre-College

PROJECTS AND RESEARCH

IRIS, 2017
Produced a senior thesis of paintings created with computer graphics and vision techniques centered around optical illusion and cognition; this show won the 2017 Seawright Award. Press release here.

Instagram Popularity Prediction via Neural Networks and Regression Analysis, 2017
Scraped a dataset of content-neutral scenery posts and evaluated the predictive power of image composition on post popularity by comparing neural network predictions (trained on aesthetic classifiers) to regression model predictions using social metadata.

Predicting Outcomes of Children from Fragile Families Using Regression Modeling, 2017
Competed in the Fragile Families challenge, a competition to predict key outcomes of disadvantaged American children using machine learning. Our regressor and binary classification algorithm performed in the top 10%.

Hiding in Plain Sight:
Adversarial Neural Net Facial Recognition, 2017
Validated research in neural network object misclassification and developed methods to "disguise" faces through image-agnostic perturbation. (Independent research with Prof. David Dobkin.)

Princeton Art Museum API, 2015-2016
Managed applications development for the art museum as a 2015-2016 McCrindle Arts Intern; developed a REST-ful database API, set up an ElasticSearch/Kibana instance, and created visualizations of museum data.

More at cjqian.github.io, including a Steam recommendation service, open-source contributions, an art porfolio, and web applications like Skedg and Flagtrip!