Benjamin Yang

Education

Rutgers University Honors College - May 2020
B.S. in Computer Science, Mathematics, Cognitive
Science; Minor in Astrophysics | GPA: 3.93 / 4.0
Dean's List | Road to Wall Street | SAS Excellence

Coursework > Schedule

Undergrad: Data Structures, Algorithms, AI,
Operating Systems, Distributed Systems, Probability
Grad: NLP, Time Series Analysis, Algorithms I, Theory of Statistics, Neurorehabilitation Robotics, Formal Language
Certificates: Coursera Deep Learning Specialization

Skills

Programming

Proficient: Python, Java, C/C++, J, Go, JavaScript

Learning: R, Swift, Android, Bash

Frameworks

Proficient: Django, Flask, ReactJS, SQL

Learning: MongoDB, Angular, Tensorflow, SciKit, Keras

Tools

<u>Proficient</u>: Git, Docker, Linux, Jupyter, Shell, VIM <u>Learning</u>: AWS, Bloomberg, Unity, Heroku, VBA, D3.js

Projects

SimPrints Chrome Ext / WebApp > About > Summer 2018

- Built Chrome extension for SimPrints third-party identification software using Vue.is and android scanner
- Integrated extension w/ hacked Bluetooth Vero API Kit

District Attorney's Office of NY > About > Summer 2018

- Developed parsing script with a team of four other fellows to translate PDF data into CSV format
- Held weekly SCRUM meetings and sprints with clients to ensure the project met constantly updating scopes
- Learned PyTesseract, Pillow, Wand, and optical character recognition python libraries to parse PDF data

Graduate Work + Research > Spring 2018

- Synthesized different Kaggle and offline datasets to train an <u>LSTM-based RNN</u> that predicts and suggests a rhyme given the input of another on existing rap lyrics
- Used Unity and 2-D Anima to build a working model of inverse kinematics for a 2-legged walking dog, wrote research paper on the benefits of neurorehabilitation
- Simulated a hydrophobic-hydrophilic model of <u>Protein</u>
 <u>Folding</u> using a modified Gibbs Energy eqn. in Java

IDEA x Worldbuilding > <u>Github</u> > Summer 2018

 Built an animated prototype of comic book Whitepaper by artist Tony Patrick in Unity, with sliders, shading, glitter, and zoom effects on all 40+ panels / covers github: benplus1 website: benyang.me

linkedin: /in/bentyang email: yang.benjamin1998@gmail.com

Experience

MakeSpace | Platform \ Software Engineer> About > Summer 2018

- Developed Item Tagging Widget using Computer Vision and Machine Learning APIs like Amazon Rekognition & Google Cloud Vision
- Created in-house ML model to tag ~1 million photographs of stored items
- Wrote **data analysis report** on the volume and type of stored items using data visualization software (**D3.is**, etc.)

XLP Capital | Software Engineer > About > March 2018 - Present

- Implemented data source integrations (loading and analysis) for Interactive Brokers, Bloomberg, CCXT, Quandl finance APIs
- Developed trading platform GUI in J, allowing for resizing, tabbing, Excel functionality and handling of 2GB sized data using JQT Framework
- Wrote three trading algorithms for trading NYSE equities & cryptocurrencies, algorithms that are still in development

Metropolitan Life | Investments IT Engineer > About > Summer 2017

- Developed Go Multithreading Tester App that stress tests MetLife databases for correct multithreading and functionality
- Worked with MongoDB and Java to develop automated derivative transaction builder and library for millions of transactions
- Used Python to download & sort 100GB+ US agricultural and climate data

Leadership

CS First-Year Interest Group Seminar | Instructor > About > Fall 2018

- One of **80** undergraduates teaching my own accredited college course.
- Deliver 10 original, activity-based lesson plans to diverse group of 25 first-years as the sole instructor for Exploring Computer Science.

Outreach Director / VP | Rutgers CS > About > Fall 2016 - Present

- Building a strong Rutgers tech community by establishing monthly speaker series with 10+ speakers reaching a 300+ student audience
- Running RUnite CS Ambassadors with 15 trained student developers, visiting 20+ middle and high schools, reaching ~1500 students
- Collaborating with the CS department to improve recruitment efforts, community spaces, professional development, alumni relations, etc.

President | Quantitative Finance Club > About > Winter 2017 - Present

- Orchestrated and taught advanced 14 technical presentations involving trading models, finance, Black-Scholes & computer science theory
- Mentored 100+ members regarding technical and practical knowledge for interviews and career search in addition to weekly mock interviews
- Maintained relationships with **40+ alumni** community, **speaker network**

Veterans 4 Warriors PM | Rutgers Enactus > About > Fall 2017 - Present

- Worked with team of student entrepreneurs to coordinate intensive ambassador program for marketing and awareness of Veterans' health
- Built relationships with 20+ student and administrative organizations
- Planned Veterans events, tabling activities, and social events with clients

Other Involvements & Activities

RU STEM x Arts > Math & Design Chair > Fall 2017 - Present
Petey Greene > Tutor at Edna Mahan Correctional Facility > Fall 2018 - Present
HackRU > Finance & Research / Development Teams > Fall 2016 - Present