# Benjamin T. Yang

6 Brunelleschi Court, Monmouth Junction, NJ 08852 | (609) 356-8275

**Github:** benplus1  **Website:** benyang.me
**Linkedin:** /in/bentyang  **Email:** yang.benjamin1998@gmail.com

## Education

**Rutgers University Honors College - May 2020**
B.S. in Computer Science, Mathematics, Cognitive Science;
GPA: **3.9** / 4.0 | SAT: **2350** / 2400 | Dean's List All Semesters
Cap & Skull (Top 18 @ Rutgers Uni.) | Road to Wall Street

**Coursework** > Transcript
*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, EDX
MITx Quantum Information Science II - States, Noises, etc.

## Projects

**SimPrints Chrome Ext / WebApp** > About > Summer 2018
- Built Chrome extension for SimPrints third-party **identification software** using Vue.js 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 LSTM-based RNN 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 a research paper on the benefits of neurorehabilitation
- Simulated a **hydrophobic-hydrophilic model** of Protein Folding using a modified Gibbs Energy eqn. in Java

**IDEA x Worldbuilding** > Github > 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

## Skills

**Programming Languages**
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**
Proficient: Git, Docker, Linux, Jupyter, Shell, VIM
Learning: AWS, Bloomberg, Unity, Heroku, VBA, D3.js

## Work Experience

**Datadog | Software Engineering Intern** > About > Summer 2019
- Developed a Python service to aggregate **millions of notifications and data** processed per second for Slack, Email, and HipChat
- Worked with Kubernetes, Cassandra, Kafka, Spinnaker, and other containerization / data wrangling tools to deploy services
- Demoed relevant projects @ **AWS Summit and DashCon** for Datadog

**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.js**, 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

## Leadership Experience

**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 **14** advanced **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 a 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
Research Assistant > **Language Acquisition and Processing Lab** > May 2017 - Present

**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