# Hollis Ma

# **Education**

# **Princeton University**

Sep '18 - May '22

• Bachelor of Science in Engineering (B.S.E) in Computer Science

CGPA: 3.5, CS GPA: 3.8

• Selected Coursework: Distributed Systems, Info Security, ML, Computer Vision, Computer Graphics, Robotics, Web3, Economics & Computing, Computational Theory, Graph Theory, Linear Algebra, Vector Calculus, Analysis

# Experience -

### Facebook | Software Engineer Intern | Droidlet Team

May '21 - August '21

- Built a set of vision annotation tools centered around label propagation, allowing agent relearning on Droidlet
- Implemented label propagation pipeline to support dynamic creation of vision training data with minimal upkeep
- Introduced pipeline for hyperparameter tuning and retraining detectors using data collected from label prop

### HackPrinceton | Co-Director

May '20 - May '21

• Led team of 40 in planning lvyHacks (inter-collegiate hackathon) and HackPrinceton S21 by organizing subteams and meetings, interviewing potential members, and communicating with various organizations

# Princeton CS Department | Computer Science Lab TA

Sep '19 - Dec '20

 Assisted students in COS226–Algorithms and Data Structures and COS217–Introduction to Programming Systems by helping debug, teaching essential computer science skills and concepts, and grading assignments and exams

## Cabinet | Software Development Research Intern

Jun '20 - Sep '20

- Used NLP to identify sets of related questions using named entity recognition and custom similarity comparisons with sentence embeddings. (SpaCy, Python)
- Optimized runtime via multithreading, precomputed vectors, custom pipelines, and automated workflows
- Spearheaded SEO improvements that increased impressions by 28% in two weeks and patched security flaws

#### Artisan Data Consulting, Inc. | Software Development Intern

Jun '19 - Aug '19

- Analyzed data and developed filters to create dynamic visualizations of donor retention (D3.js, React)
- Introduced admin functionality to platform by creating UI and interactions with database (Angular, Flask, SQLAIchemy)

# Projects -

# Day Zero | Social Platform

Mav '19 - Jan '20

- Led team of 6 in design and creation of full stack meetup platform with 200+ registrations within a week
- Wrote 7000+ lines of code creating 30+ endpoints in a RESTful API, dozens of custom-designed components, authentication systems, matching algorithms, and login integrations (MongoDB, Express, React, Redux, Node.js)

#### Princetaverse | NFT Marketplace

Apr '22 - May '22

- We created Princeton's first virtual real estate platform with interactive map and trading functionality
- Minted custom NFTs, developed custom Princeton Coin token, connected platform to Ethereum blockchain

# Pac-Atac | 2.5D SHOOTER

May '20

- We built a Pacman-themed 2.5D shooter with waves of enemies, powerups, leaderboard functionality, and HUDs
- Won "Best Gameplay Award" out of 36 graphics oriented projects

# Skills

Languages Python, JavaScript, TypeScript, Java, C, Golang, HTML/CSS, SQL, LATEX, Solidity

**Technologies** React, Redux, Express, Node.js, Gatsby, GraphQL, Flask, MongoDB, Three.js, D3.js, PyQt5, web3.js NumPy, Pandas, Scikit, SpaCy, NLTK, Detectron2, Docker, AWS (EC2, Amplify, AppSync), Git

## Awards -

- **Eagle Scout:** Led 20+ people in designing and constructing a 600 sqft patio
- National AP Scholar: Took 20 AP tests (9 self-studied) with an average of 4.7/5.0
- National Merit Scholar: Tested at top 1% of high school students