

# JINAY JAIN

Hockessin, DE ♦ jinay.dev ♦ jinaybjain@gmail.com ♦ github.com/jinayjain

## EDUCATION

---

### University of Delaware

Expected May 2024

Honors B.S. in Computer Science, Distinguished Scholars Program  
President of the Association for Computing Machinery (ACM)

### Charter School of Wilmington

Aug. 2016 - Jun. 2020

High School Diploma

Weighted GPA: 4.66

## EXPERIENCE

---

### University of Delaware, Human-Computer Interaction (HCI) Lab

Jun. 2020 - Present

*Research Assistant*

*Newark, Delaware*

- Building a nurse training environment in augmented and virtual reality
- Using the Unity XR Toolkit to build for the **Oculus Quest, Microsoft Kinect, and HoloLens**
- Attending weekly paper presentations to discuss novel research in HCI and AI

### Nemours Alfred I. DuPont Hospital

Jun. 2019 - Aug. 2019

*Research Assistant*

*Wilmington, Delaware*

- Developed a machine learning algorithm to perform diagnoses on hip ultrasound scans
- Implemented convolutional neural networks and data augmentation in Python using TensorFlow
- Accepted to the **Society for Pediatric Radiology 2020 Conference** (cancelled due to COVID-19)

## PROJECTS

---

### Backpropagation Visualization

*TypeScript, Webpack, Jest*

- Created a backpropagation engine to mimic the operation of machine learning frameworks
- Visualized forward and backward passes in a neural network using a computation graph
- Used **test-driven development** to ensure core functionality

### BeTrade

*MongoDB, Express, React, Node, Docker*

- Built an online stock market game with biweekly contests
- Implemented an **N-player Elo algorithm** to rank players on a leaderboard

### VimDocs

*Vue, WebSockets*

- Developed a collaborative text editor that mimics the Vim editor keybindings
- Used Socket.io to relay **realtime messages** between the client and server with WebSockets

## HONORS / AWARDS

---

**Google Code Jam, Round 2, 2018 & 2019** - Top 3% of over 74,000 global registrants

**U.S.A. Computing Olympiad, Gold Division, 2019**

**South by Southwest EDU Startup Competition, Invited Finalist, 2019**

## SKILLS

---

|                   |  |
|-------------------|--|
| <b>Languages</b>  | Python, C++, Java, HTML, CSS, JavaScript, TypeScript |
| <b>Frameworks</b> | TensorFlow, Keras, Node.js, React, Express, Flutter  |
| <b>Tools</b>      | Linux, Git, Docker, Vim, Unity (C#)                  |
| <b>Other</b>      | NumPy, Jupyter, Pyplot, Pandas, MongoDB, Flask       |