# **Anthony Ding**

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# **EDUCATION**

# University of California, Berkeley

B.S. Electrical Engineering and Computer Science

Aug 2018 - May 2022

GPA: 3.9/4.0

**Coursework:** Algorithms, Data Structures, Computer Architecture, Data Science, Machine Learning, Operating Systems, Security, Graphics, Optimization, Discrete Math/Probability, Artificial Intelligence

**Activities:** Data Structures Course Tutor, Computer Science Mentors – Senior Mentor, Undergraduate Research Apprentice Program, Eta Kappa Nu, StemEd – Academic Committee, Tau Beta Pi

### **EXPERIENCE**

## **Undergraduate Researcher** | Lawrence Berkeley National Lab

Feb 2021 – Present

Applied graph neural networks (GNNs) to classify particle physics phenomena in Professor Haichen Wang's lab

- Developed software package to tailor DeepMind's Graph Nets library for particle physics-focused graphs
- Trained GNNs to differentiate top quark events using ROOT data from the Large Hadron Collider
- Created automated testing framework, project's main documentation, and tutorial Jupyter notebooks

#### Software Engineering Intern | UBTECH Robotics R&D

Jun 2020 - Aug 2020

Designed and developed computer vision annotation framework for robotic arm dexterity experiments

- Integrated hand manipulation/gripping physics tools into LabelMe annotation GUI using PyQt libraries
- Built relational database system and C++ API to store annotated properties of grasped objects
- Automated experimental data collection and visualization using NumPy with shell and Python scripts

# **Lead Developer** | Eta Kappa Nu Honor Society

May 2019 – May 2020

Led team of 20 to build new website using Django, serving 300+ members, 5000+ students, and 50+ companies

- Created candidate portal for prospective honor society members to track initiation requirements
- Developed online exam bank to provide Berkeley EECS undergraduates with released practice tests
- Designed industry relations pages for companies to schedule infosessions and order HKN resume books

# **SKILLS**

- NumPy, Pandas, TensorFlow, SQL/Relational Databases, React, Node.js, Django, OpenGL, Figma, Git
- Languages: Python, C/C++, Java, Go, Assembly (x86, RISC-V), HTML/CSS, JavaScript, GLSL
- 3x USA Math Olympiad Qualifier Recognized as top 200 precollegiate math students in USA

# **PROJECTS**

### Imprint.to | React, Node.js, Express, MongoDB

- Built Imprint, a social blogging platform focusing on content ownership, with engineering team of 3
- Incubated at Mozilla Builders "Fix the Internet" Incubator MVP lab with \$16k grant funding
- Defined marketing and growth strategies using Mixpanel and HubSpot, reaching 500+ users in 2 months

## No-code Course Websites | HTML, CSS, JavaScript, JQuery

- Started a website creator geared towards helping professors make course websites without coding
- Designed and wireframed product in Figma, using feedback from conversations with UC Berkeley TAs
- Currently developing the main pipeline to convert drag-and-drop blocks to website structure