

Brian S. Xu

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EDUCATION

University of California, Irvine, Irvine, CA

Bachelor of Science, Computer Science; GPA: 3.88

2019 – 2022

Dean's Honor List, 2019 – 2022

Relevant Coursework: Intro to Artificial Intelligence, Machine Learning and Data Mining, Introduction to Graphical Models, Introduction to Optimization, Applications of Probability in CS, Computational Photography and Vision, Project in Artificial Intelligence, Project in Computer Vision

RESEARCH INTERESTS

Inverse graphics; 3D reconstruction; Novel view synthesis; Neural network architectures; Neural rendering; Simultaneous location and mapping

INDUSTRY EXPERIENCE

Meta Platforms, Inc.

Software Engineering Intern

June – September 2022

Improved the speed and scalability of a data annotation pipeline by integrating ML/CV models. Doubled efficiency while reducing data footprint by over 80% through efficient caching and usage of predictions from upstream in the pipeline. Redesigned database to better integrate with internal data visualization tools for quality control.

Amazon.com, Inc.

Software Engineering Intern

June – September 2021

Accelerated the user registration process by implementing a responsive user interface built in jQuery. Designed a robust and scalable backend with the Spring Framework, deployed on AWS. Utilized RESTful design principles to communicate sensitive user data between internal endpoints. Collaborated closely with UI designers to create a responsive user experience.

LEADERSHIP / MEMBERSHIP

Artificial Intelligence @ University of California, Irvine

Student Mentor

March 2020 – June 2021

Organized and planned quarterly meetings. Designed and taught machine learning workshops to students. Led club presentation for university hackathon and judged student projects.

LEADERSHIP / MEMBERSHIP (cont.)

Women in Computer Science, University of California, Irvine
Member

WORKSHOPS

“RenderNet: 3D Voxel Rendering with Deep Convolutional Networks” <i>Artificial Intelligence @ UCI</i>	April 2021
“HackUCI - Supervised Learning with Online Datasets” <i>HackUCI 2021</i>	January 2021
“PIFuHD: Image-Based 3D Human Shape Estimation” <i>Artificial Intelligence @ UCI</i>	January 2021
“Fundamental Machine Learning / Data Science Tools” <i>Artificial Intelligence @ UCI</i>	November 2020
“BERT: Bidirectional NLP with Transformers” <i>Artificial Intelligence @ UCI</i>	May 2020

PROJECTS

Inverse Graphics GAN: Learning to Generate 3D Shapes from Unstructured 2D Data
github.com/brian-xu/IGGAN
Implemented and trained a neural network for generating 3D models representing 2D images, based on the specifications of a novel research paper. Built an efficient data pipeline to provide accurate and uniform data for model training.

LANGUAGES

Chinese (conversational)

TECHNICAL SKILLS

Python, PyTorch, NumPy, matplotlib, Jupyter, OpenCV, pandas, TensorFlow, TensorBoard, Flask, Git, C++, MySQL, Google Cloud