

DUN-MING (BRANDON) HUANG

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EDUCATION

University of California, Berkeley

August, 2021 - May, 2025

B.A., Cognitive Science and Computer Science (Double Major)

Computer Science GPA: 4.00/4.00

Selection of Courseworks:

All-Course GPA: 3.99/4.00

COMPSCI 189: Introduction to Machine Learning (A+)

EECS 127: Optimization Models in Engineering (A+, PR ≥ 98)

COMPSCI 285: Deep Reinforcement Learning (Concurrent)

RESEARCH EXPERIENCE

Research Intern, Max Planck Institute for Empirical Aesthetics

July (June) - August 2023

Topic 1: Novel MCMC Methods to Sample Linguistic Objects from Populations and LLMs

Topic 2: Human-in-Loop Annotation and Fine-Tunings of Machine Translations

Topic 3: Unsupervised Cross-Domain Alignment of High-Dimensional Psychological Spaces

There are two concurrent collaborations with this research group after internship.

As of time of writing, three publications are expected from development of these progresses.

Supervisor: Dr. Nori Jacoby, Computational Auditory Perception Research Group

RELATED PROJECTS

Provably Robust Deep Classifiers Against Adversarial Attack

U.C. Berkeley

May 2023

In this course project, conducted replication study of adversarial attack methods against dense NNs.

Reenact mathematical works in papers, leading to implementations insights out of assignment scope.

Proposed novel initiation patterns for L_2 adversarial attack, reducing dense networks accuracy to 0%, and documented results in a report submitted to be read by professor and graduated students.

Student Researcher

Creative Commons and U.C. Berkeley

September - December 2023

Revive Creative Commons's data-driven business analysis projects from its 5 year dormancy, jumpstarting a sustainable documented codebase for coming student researchers to extend upon.

Host public presentation at U.C. Berkeley detailing analysis results on global scaling of CC products.

Selected for Data Insight Award by U.C. Berkeley, amongst 50 other competing groups.

Project LiP: Personal Assistant for Mental Management

Self-exploration HCI Project

March-April, June-August 2022

Constructed from scratch a full-stack agent for periodic interventions to prevent burnout.

Self-studied native full-stack development for application interface and rendering interventions, and statistical algorithms for predicting user exhaustion, making multiple designs based on HCI literature.

Hands-on experience for face expression recognition across 7 emotion classes at 68% accuracy.

ACADEMIC AND ADMINISTRATIVE EXPERIENCES

Undergraduate Student Instructor

U.C. Berkeley

August - December 2023

Course: DATA C100- Principles and Techniques of Data Science

Course Coordinator at Computer Science Mentor

U.C. Berkeley

August - December 2023

A student-run organization that provides guidance and resources through free group tutoring sessions.
Co-administrate one of seven branches at this organization with 30+ expected members.
Hosted cross-branch workshops, established public documentations on pedagogical content production.

Academic Student Employee

U.C. Berkeley

January 2022 - December 2023

Course Reader at DATA 100

January - May 2023

Course Reader at EECS 16A

August - December 2022

AWARDS AND SCHOLARSHIPS

Data Insights Award at Data Science Discovery, U.C. Berkeley

December, 2022

Recognized for detailed execution of entire data science life cycle amongst 50+ other groups in U.C. Berkeley's Data Science Discovery program.

Dean's List, Honors to Date, U.C. Berkeley

available record seen until December, 2022

SKILLS

Familiar, or Frequently Used within Last 6 Months

Programming Languages: Python, SQL, L^AT_EX, HTML, CSS, JavaScript

Notable Tools: Git, Docker, pandas, NumPy, scikit-learn, matplotlib, sns, pytorch

Frequently Used during Previous Projects

Programming Languages: Java, MATLAB, Lisp

Notable Tools: tkinter, keras