

Christopher Bender

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EDUCATION

UC Berkeley, 2021

Pure Math and CS, Double Major

GPA: 3.81

Accel Scholar

COURSEWORK

Courses in **bold** are graduate-level.

CS 61B	Data Structures
CS 61C	Machine Structures
CS 70	Probability Theory
CS 170	Algorithms
CS 189	Machine Learning
CS 280	Computer Vision
CS 294-112	Deep RL
CS 294-158	Unsupervised Learning
CS 294-162[†]	Systems for ML
EECS 127	Optimization
Stat 210A	Theoretical Statistics
Math 136 [†]	Incompleteness
Math 142 [†]	Algebraic Topology
Math H104	Honors Real Analysis
Math H110	Honors Linear Algebra
Math H185	Honors Complex Analysis

SKILLS

Python	PyTorch	Vim
PySpark	AWS	Git
Unix	LaTeX	TensorFlow

PUBLICATIONS

Synthetic Datasets for Neural Program Synthesis, Shin et. al. **ICLR 2019** and **NAMPI Workshop** at ICML 2018.

Leveraging Unlabeled Data for Watermark Removal of Deep Neural Networks, Chen et. al. **SPML Workshop** at ICML 2019.

[†]Expected, Fall 2019.

EXPERIENCE

Nuro | Machine Learning Research Internship | May - Aug 2019

- SoftBank-funded Series B startup building self-driving vehicles for goods delivery.
- Worked as a ML research intern, studying learned video compression for low-latency teleoperation.

Machine Learning at Berkeley | VP of Research | Oct 2018 - Present

- Student organization working on ML industry consulting, research projects, and educational initiatives.
- Currently spearheading ML@B's research arm, interfacing with PhD students to place undergrads in research labs. Manage 3-4 research projects each semester.

Stability of GAN Metrics | Research | Sep 2019 - Present

- Working under Prof. Dawn Song and PhD student Richard Shin on stability and robustness of various GAN metrics (inception score, FID score, etc.) to find better measures of GAN quality.

Neural Network Watermarking | Research | Feb 2019 - Present

- Working under Profs. Dawn Song and Bo Li on adversarial vulnerabilities of neural network watermarking schemes.
- Published at the 2019 ICML SPML workshop.

Neural Program Synthesis | Research | Jan 2018 - May 2019

- Worked under Prof. Dawn Song and PhD student Richard Shin on synthetic dataset generation for robust generalization of neural program synthesis models.
- Published at ICLR 2019 and the 2018 ICML NAMPI workshop.

Walmart Labs | Machine Learning Internship | May - Aug 2018

- Worked on information retrieval and semantic metric learning for Walmart's integration with the Google Home.
- Developed and deployed a question-answering system sourced from both Walmart catalogs and FAQ databases.
- Filed a patent for my work; currently awaiting approval.

Program in Mathematics for Young Scientists | Jun - Aug 2016

- Engaged in a six-week summer program aimed at rigorously building Number Theory from the ground-up.