Thomas Larsen

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EDUCATION

University of Michigan, Ann Arbor, MI

September 2018 – present

- Honors B.S. Computer Science and Mathematics. Expected graduation May 2022
- GPA: 3.9/4.0
- Selected Coursework: Algorithms (477), Machine Learning (445), Operating Systems (482), Artificial Intelligence (492), Analysis (295, 451, 452), Algebra (217, 493, 494), Logic (681, 684)

WORK EXPERIENCE

Research Assistant, Wenisch Lab, University of Michigan

May 2019 - present

- Designed and implemented model to detect road maneuvers (e.g. left turn, lane change) from vehicle dash cam video using computer vision techniques
- Wrote and debugged Python code to process images, train and test TensorFlow models, generate statistics, and visualize results.
- Started a project on representing uncertainty in deep learning models using a Bayesian approach

Teaching Assistant, University of Michigan

September 2019 – present

- Taught EECS 445 (Machine Learning), EECS 376 (Theory of Computer Science)
- Taught a discussion section, held office hours, and helped write homework, projects, and exams
- Held one on one tutoring sessions that introduced Math 217 (Linear Algebra) students to writing formal mathematical proofs

Machine Learning Intern, KLA, Ann Arbor, MI

May 2020 - August 2020

- Improved CNN inference throughput 12x by applying TensorRT to TensorFlow models
- Expanded TensorFlow serving interface to allow client to send custom data to a server with gRPC

AWARDS

| - Google Cloud | Grant Recipient, | , Google | Aug 2021 |
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- Mathematics Merit Scholarship, University of Michigan Mathematics Aug 2021

- Outstanding Achievement Award, University of Michigan Mathematics May 2021

LEADERSHIP EXPERIENCE

Effective Altruism Club

September 2018 - present

- Completed the University of Michigan Effective Altruism Fellowship
- Planned and executed sequences of meetings focused on discussing existential risk

Academic Games Coach, Slauson Middle School

September 2018 - April 2019

- Taught middle schoolers games covering topics including set theory, formal logic, and history

SKILLS

Programming Languages C++, Python
Software Cit, Linux, LaTeX, TensorFlow, NumPy, PyTorch, Docker, gRPC