Arlene Siswanto

✉ arlenesiswanto@gmail.com 📞 (626) 872-7820 </> http://arlenesiswanto.me

COURSEWORK

Graduate Level
- 6.435 - Bayesian Modeling and Inference
- 6.883 - Machine Learning
- 6.864 - Natural Language Processing
- 6.819 - Computer Vision
- 6.840 - Theory of Computation
- 6.857 - Computer Security
- 6.S974 - Decentralized Applications

Mathematics
- 18.650 - Statistics
- 18.615 - Stochastic Processes
- 18.600 - Probability
- 18.065 - Matrix Methods for Data Analysis and ML

SKILLS

Languages - Python, JavaScript, C++, Java, Matlab, R

Tools - PyTorch, JAX, Keras, Scikit-learn, React, Angular

HACKATHONS

Solana Ignition '21 - Grand Prize

HackPrinceton '18 - Best Augmented Reality Hack

PennApps '17 - PennApps Second Place Overall

HackPrinceton '17 - Best Internet of Things Hack

MakeMIT '17 - Top 10 Hack

🅳 devpost.com/arlenesiswanto

in /in/arlenesiswanto

www arlenesiswanto.me

EDUCATION

Massachusetts Institute of Technology | Cambridge, MA   *Jun '20 - Dec '20*
- M.Eng. in Artificial Intelligence, Advisers: Michael Carbin and Jonathan Frankle
- Thesis: Block Sparsity and Weight Initialization in Neural Network Pruning

Massachusetts Institute of Technology | Cambridge, MA   *Sep '16 - May '20*
- B.S. in Computer Science and Engineering, Minor in Mathematics

WORK EXPERIENCE

Google Brain - AI Resident | New York, NY   *Feb '21 - present*
- Conducted large scale experiments to understand the effects of randomness on the bias and variance of neural networks used in practice

DeepMind - Research Platform Intern | London, UK   *Sep '19 - Jan '20*
- Developed alongside Research Platform Team on platform that allows researchers to perform an initial analysis of their experiments
- Expanded analyses to support non-scalar tensor data, such as images and arrays

Shell Street Labs - Quantitative Research Extern | Hong Kong   *Jan '20 - Jan '20*
- Predicted IPO market trends using regression and NLP techniques

Jump Trading - Software Engineering Intern | Chicago, IL   *Jun '19 - Aug '19*
- Developed on equities trading team to automate configuration verification
- Built standalone trading microplatform with real-time connections to exchanges

Bloomberg - Software Engineering Intern | New York, NY   *Jun '18 - Aug '18*
- Developed on the Execution Management System (EMSX) trading platform, an application used by over 20,000 traders and brokers to execute orders

PROJECTS

Katana   *Fall '21*
Decentralized yield generation on the Solana blockchain. Grand Prize winner of the Solana Ignition hackathon; invited to the official conference in Lisbon

Gather Town   *Fall '20*
Early team member at a company that has since raised $77m. Developed on a social platform that combines video calls with custom 2-D spaces

dormsp.am   *Spring '19*
Platform built for the MIT community that scrapes, parses, and aggregates on-campus events advertised on email with hundreds of weekly users upon release

RESEARCH & PUBLICATIONS

Decomposing Variance from Mini-Batch Order and Parameter Initialization   *Google*
Arlene Siswanto, Ben Adlam, Lechao Xiao, and Jeffrey Pennington
Bay Area Machine Learning Symposium, 2021.

Reconciling Sparse and Structured Pruning: A Scientific Study of Block Sparsity   *MIT*
Arlene Siswanto, Jonathan Frankle, and Michael Carbin
ICLR Workshop — Science and Engineering of Deep Learning, 2021

Examining the Role of Normalization in the Lottery Ticket Hypothesis   *MIT*
Arlene Siswanto, Jonathan Frankle, and Michael Carbin
ICLR Workshop — Science and Engineering of Deep Learning, 2021