# Bruce Lee

General Robotics, Automation, Sensing, and Perception
Department of Electrical and Systems Engineering
University of Pennsylvania

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## Education

**University of Pennsylvania** Philadelphia, PA, USA
*Ph.D. in Electrical and Systems Engineering* 2020-2025(expected)
- Research Focus: Learning for Control & Robotics
- Advisor: Nikolai Matni

**University of Minnesota** Minneapolis, MN, USA
*B. Eng. in Electrical Engineering with High Distinction, Summa Cum Laude* 2016-2020
- Minor in Mathematics
- GPA: 4.0/4.0, Concentration: Optimization and Control
- Thesis: Improved numerical performance guarantees for optimization algorithms

## Conference Publications

- **B. Lee** and A. Lamperski, "Non-asymptotic Closed-Loop System Identification using Autoregressive Processes and Hankel Model Reduction", Conference on Decision and Control 2020
- **B. Lee** and P. Seiler, "Performance Analysis of First-order Optimization Methods using Interpolation Conditions without Function Evaluations," American Control Conference 2021
- J. Xu, **B. Lee**, N. Matni, D. Jayaraman "Are Learned Perception-Based Controllers Bound by the Limits of Robust Control?", Learning for Dynamics and Control 2021

## Teaching Assistant

- ESE530: The Theory of Probability — Fall 2021, University of Pennsylvania
- EE4233: State Space Control Systems — Spring 2020, University of Minnesota
- EE4231: Classical Control Systems — Fall 2019, University of Minnesota
- EE3115: Analog Electronics — Summer 2019, University of Minnesota
- EE2011: Linear Systems, Circuits, & Electronics — Spring 2019, University of Minnesota
- EE3015: Signals & Systems — Fall 2018, University of Minnesota
- PHYS1301W: Introductory Physics for Science & Engineering — Fall 2017, University of Minnesota

## Skills

**Programming Languages:** Python, Matlab, C/C++
**Machine Learning and Computer Vision Packages:** Pytorch, Jax, OpenCV

## Outreach and Service

President - Omicron Chapter of Eta Kappa Nu (IEEE Honors Society) 2018-2020
MNDrive Scholar, Middle School Outreach - University of Minnesota 2019

## Honors and Awards

*National Defense Science and Engineering Graduate Fellowship* 2020