

Nathan O Lambert

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EDUCATION

University of California, Berkeley

Department of Electrical Engineering and Computer Sciences

Expected - 2021 | Berkeley, CA

PhD Candidate | GPA: 4.0

Cornell University

BS in Electrical and Computer Engineering

May 2017 | Ithaca, NY

GPA: 4.0

LINKS

Personal Website natolambert.me

LinkedIn:// [nathanlambert](#)

Github://[natolambert](#)

Blog [democraticrobots.com](#)

PUBLICATIONS

- [1] N. Lambert, A. Wilcox, H. Zhang, E. Zhu, L. Lee, and K. Pister, "Learning accurate long-term dynamics for model-based reinforcement learning," *Under Review*, 2020.
- [2] N. Lambert, C. Schindler, D. Drew, and K. Pister, "Nonholonomic yaw control of a novel flying robot with model-based reinforcement learning," *Under Review*, 2020.
- [3] N. Lambert, F. Toddywala, B. Liao, E. Zhu, L. Lee, and K. Pister, "Learning for microrobot exploration: Model-based locomotion, robust navigation, and low-power deep classification," *International Conference on Manipulation, Automation and Robotics at Small Scales (MARSS)*, 2020.
- [4] N. Lambert, B. Amos, O. Yadan, and R. Calandra, "Objective mismatch in model-based reinforcement learning," *Learning for Decision and Control (L4DC)*, 2020.
- [5] T. Li, N. Lambert, R. Calandra, A. Rai, and F. Meier, "Learning generalizable locomotion skills with hierarchical reinforcement learning," *International Conference on Robotics and Automation (ICRA)*: <https://arxiv.org/abs/1909.12324>, 2020.
- [6] N. O. Lambert, D. S. Drew, J. Yaconelli, S. Levine, R. Calandra, and K. S. J. Pister, "Low-level control of a quadrotor with deep model-based reinforcement learning," *IEEE Robotics and Automation Letters*, vol. 4, no. 4, pp. 4224–4230, 2019.
- [7] D. S. Drew, N. O. Lambert, C. B. Schindler, and K. S. Pister, "Toward controlled flight of the ionocraft: A flying microrobot using electrohydrodynamic thrust with onboard sensing and no moving parts," *IEEE Robotics and Automation Letters*, vol. 3, no. 4, pp. 2807–2813, 2018.
- [8] K. B. Vinayakumar, V. Gund, N. Lambert, S. Lodha, and A. Lal, "Enhanced lithium niobate pyroelectric ionizer for chip-scale ion mobility-based gas sensing," *Proceedings of IEEE Sensors*, no. 1, pp. 3–5, 2017.

FELLOWSHIPS AND AWARDS

Graduate

2018 NDSEG Graduate Research Fellowship Program Top 200

2018 NSF Graduate Research Fellowship Program Honorable Mention

2017 NSF Graduate Research Fellowship Program Honorable Mention

Undergraduate

2017 Cornell Rowing Charles E. Courtney Award
2016 Tau Beta Pi Scholarship
2016 Southeastern New England Defense Industry Alliance STEM Scholarship II
2016 Cornell Athletics 400 Club Induction
2015 Southeastern New England Defense Industry Alliance STEM Scholarship I
2015 Tau Beta Pi Induction
2015 Eta Kappa Nu Induction
2014 American Society of Engineering Education SMART Scholar Award

SELECTED COURSEWORK

Deep Reinforcement Learning • Intro to Machine Learning • Linear System Theory • Hybrid Systems: Computation and Control • Statistical Signal Processing and Learning • Digital Image Processing • Robot Ethics • Evolutionary Processes and Algorithms • Experiential Advanced Control Design II

EXPERIENCE

Facebook AI Research | Research Intern, Contingent Worker

Summer 2019-Present | Dr. Roberto Calandra | Robotics Team | Menlo Park, CA

Autonomous Microsystems Lab | Graduate Student Researcher

2017-Present | Professor Kris Pister | University of California, Berkeley | Berkeley, CA

Tesla Motors | Engineering Intern

Summer 2015 | Hardware, Test, & Analysis Team | Palo Alto, CA

TEACHING

Graduate

Fall 2020 Teaching Assistant for CS188: Introduction to Artificial Intelligence
Summer 2020 Teaching Assistant for CS188: Introduction to Artificial Intelligence
Spring 2020 Instructor for CS188: Introduction to Artificial Intelligence
Fall 2019 Teaching Assistant for EE 16B: Designing Information Devices and Systems II

Undergraduate

Spring 2017 Grader for ECE 4320: Integrated Micro Sensors and Actuators
Fall 2016 Teaching Assistant for ECE 3250: Mathematics of Signal and System Analysis

PEER REVIEW

International Conference on Machine Learning (ICML) • Robotics and Automation Letters (RA-L) • International Conference on Robotics and Automation (ICRA) • Transactions on Cybernetics

SERVICE

Graduate

Fall 2017 Bay Area Scientists in Schools

Undergraduate

Fall 2016 Cornell *Splash!* Program (with Eta Kappa Nu Honors Society)
July 2016 CATALYST Summer Engineering Diversity Program
2015-2017 Big Red Leadership Institute

EXTRACURRICULARS

Cornell Varsity Lightweight Rowing | Student-Athlete

2013-2017 | Coach Chris Kerber | Cornell University | Ithaca, NY

Berkeley Lightweight Crew | Novice Rowing Coach

2017-2018 | University of California, Berkeley | Berkeley, CA