

Simon D. Levy

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<https://simondlevy.academic.wlu.edu>

<https://github.com/simondlevy>

<https://www.youtube.com/user/simondlevy>

Education

- 2003 Ph.D. in Computer Science from Brandeis University
1991 M.A. in Linguistics from the University of Connecticut
1987 B.A. in Linguistics (*magna cum laude*) from Yale University

Professional Experience

- 2019 Visiting Professor, Mechanical Engineering, Ben Gurion University of the Negev
2019 Consultant, Robotican Ltd., Omer, Israel
2015-present Professor of Computer Science, Washington and Lee University
2008 – 2015 Associate Professor of Computer Science, Washington and Lee University
2009 – 2013 Department Head, Computer Science, Washington and Lee University
2002–2008 Assistant Professor of Computer Science, Washington and Lee University
2000-2001 Software Developer, Alphatech, Burlington MA
1997-1999 Software Developer, Links2Go, Woburn MA
1991-1996 Software Developer, Haskins Laboratories, New Haven CT

Expertise

Miniature Aerial Vehicles

(<http://diydrone.com/profiles/blog/list?user=218dwea9c03pl>)

Robotics / Simulation

(<http://home.wlu.edu/~levys/courses/csci250s2017/>)

Artificial Intelligence / Neural Nets / Deep Learning

(<http://home.wlu.edu/~levys/courses/csci315w2016/>)

Linguistics / Cognitive Science

<http://home.wlu.edu/~levys/courses/anth252f2006/>

Publications past six years (*student co-author)

Levy, S.D. (2020) A Simple Platform for Reinforcement Learning of Simulated Flight Behaviors. *Proceedings of Living Machines 2020 (Lecture Notes in Computer Science)*, Springer Verlag.

Levy, S.D. (2020) Robustness Through Simplicity: A Minimalist Gateway to Neurobotic Flight. *Frontiers in Neurorobotics*, 16 March 2020.

Lowney, C., S.D. Levy, W. Meroney and R. Gayler (2020) Connecting 21st Century Connectionism and Wittgenstein. *Philosophia*, 11 March 2020.

Wilkinson, C.*, D. Harbor, T. Keel*, S. Levy, and J. Kuehner (2016) Sensing fluid pressure during plucking events in a natural bedrock channel and experimental flume. Abstract accepted for poster presentation at AGU 2016.

Kaplan, D.T., S.D. Levy, and K.A. Lambert (2016). *Introduction to Scientific Computing and Programming in Python*. Mosaic Books.

Levy, S.D., C. Lowney, W. Meroney, and R.W. Gayler (2014) Bracketing the Beetle: How Wittgenstein's Understanding of Language Can Guide Our Practice in AGI and Cognitive Science. In B. Goertzel et al. (Eds.) *Proceedings of the Seventh Conference on Artificial General Intelligence (Lecture Notes in Computer Science 8598)*, Springer-Verlag).

Invited Presentations past six years

Innovative Drone Research: Bridging the Gap Between Hardware and Simulation. Presented at the 6th Israeli Conference on Robotics, Herzliya, Israel, 9 July 2019.

LadybugFC: A 32-Bit Brushed-Motor Flight Controller that You Program with Arduino. Intercollegiate Dronefest, 28 July 2017

Hackflight: A Simple Software Ecosystem for Miniature Aerial Vehicles. Intercollegiate Dronefest, 18 August 2016

Wittgenstein's Robot: Philosophy, Information, and Artificial Life, Workshop on Information Theoretic Incentives for Artificial Life, 30 July 2014

External Grants

2015 *Structure from Motion (SfM) Geological Modeling using Terrestrial and Aerial Imagery from a Vertical Take Off and Landing Unmanned Aerial Vehicle (VTOL UAV)*. CIT-CRCF Grant MF14S-028-MS [Participant] **\$38,000 (\$5000)**.

Fall 2014 *A Forward Modeling Program for Fault-bend Folding*. Research Contract No. CW1203819, Chevron USA Inc. [Co-PI] **\$33,000**.

Summer 2014 Center for Innovative Technology Commonwealth Research Commercialization Fund Grant: *Simultaneous Localization and Mapping in Python for RF-Denied Environments* (CRCF #MF14F-011-MS). [PI] **\$19,286**

W&L Courses taught

CSCI 101 Survey of Computer Science
CSCI 102 Introduction to Computational Modeling
CSCI 111 Fundamentals of Programming (II)
CSCI 112 Fundamentals of Programming (II)
CSCI 121 Scientific Computing
CSCI 180 Freshman Seminar: Robot and Mind
CSCI 250 Introduction to Robotics
CSCI 252 Neural Networks and Graphical Models
CSCI 251 iPhone Application Programming
CSCI 312 Programming Language Design
CSCI 313 Theory of Computation
CSCI 315 Artificial Intelligence
CSCI 318 Android App Development
CSCI 332 Compiler Construction
CSCI 397 Genetic Algorithms

Other teaching

362.2.5322 Introduction to Deep Learning (Ben Gurion University of the Negev)

Python Programming and Robotics. Virginia STEAM Academy, summer 2016/2017.