

Curriculum Vitae
Youngmin Park
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University of Pittsburgh
Department of Mathematics
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DOB: 10/28/1988
Citizenship: USA

Education

1. University of Pittsburgh PhD Candidate, May 2018 (expected)
Advisor: Bard Ermentrout
2. CWRU MS in Applied Mathematics, 2013
Thesis: Infinitesimal Phase Response Curves for Piecewise Smooth Dynamical Systems
Advisors: Peter J. Thomas, Hillel J. Chiel
3. CWRU BS in Applied Mathematics, 2013

Papers

Shaw, Kendrick M., Young-Min Park, Hillel J. Chiel, and Peter J. Thomas. "Phase Resetting in an Asymptotically Phaseless System: On the Phase Response of Limit Cycles Verging on a Heteroclinic Orbit." SIAM Journal on Applied Dynamical Systems 11.1 (2012): 350-91.

Teaching

- Summer 2015: Introduction to Matrices and Linear Algebra (lecture)
- Spring 2015: Discrete Mathematical Structures (lecture)
- Fall 2014: Calculus 1 (recitation)
- Summer 2014: Differential Equations (lecture)
- Fall 2013: Business Calculus (recitation)

Work Experience

1/2009 – 10/2012 Freelance Web Developer

Created or maintained websites for:

- University Hospitals of Cleveland Department of Dermatology
- Murdough Center for Psoriasis
- Valadkhan Lab in CWRU Medical School
- Watanabe Lab in University Hospitals
- Rainbow Babies and Children's Hospital Residents' Website

5/2011 – 8/2011 CWRU Department of Biology, Dr. Hillel J. Chiel, Dr. Peter J. Thomas, Undergraduate Research Assistant

Phase plane analysis and phase response analysis using open source packages in Python (numpy, scipy, and matplotlib), and other numerical analysis programs like MATLAB, Mathematica, and XPP.

1/2009 – 7/2011 CWRU Department of Mathematics, Dr. Peter J. Thomas, Dr. Chris G. Wilson, Undergraduate Research Assistant

Computer modeling of neurons in the pre-Boetzinger complex the region in the mammalian brain stems responsible for breathing. Interfaced a NEURON with Python to take advantage of tools for numerical analysis available in Python.

6/2010 – 8/2010 CWRU Department of Mathematics, Dr. Peter J. Thomas

Helped restructure a course on biological stochastic processes by implementing MCell, a Monte-Carlo simulator for stochastic processes.

4/2009 – 6/2009 CWRU Medical School, Dr. Saba Valadkhan, Undergraduate Research Assistant

Used miniprep to amplify RNA sequences. Programmed in Mathematica and Python to organize RNA data suitable for research.

Honors and Awards

SPUR (Summer Program for Undergraduate Research)/P-SURG, 2012

Choose Ohio First Scholarship (2010-2012)

Dean's Honors Spring 2010, Fall 2010, Spring 2011

Dean's High Honors Fall 2009, Fall 2011, Spring 2012

Additional Skills

- Python (numpy, scipy, and matplotlib)
- MATLAB
- Mathematica
- XPP
- MCell/DReAMM
- R
- NEURON
- HTML/CSS
- Drupal
- UNIX
- Perl