PEILUN DAI

111 Cummington Mall, Boston, MA 02215
+1 (857) 400-8866 ⋄ peilun@bu.edu ⋄ peilund.ai

EDUCATION

Boston University 9/2018 - present
PhD Candidate in Computer Science *Boston, MA, US*

Massachusetts Institute of Technology 9/2015 - 9/2018
Master of Science in Brain and Cognitive Sciences *Cambridge, MA, US*

Nanyang Technological University 9/2010 - 5/2014
Bachelor of Engineering (1st Class Hons) in Electrical and Electronic Engineering *Singapore*

WORK EXPERIENCE

Boston University 2/2019 - Present
Teaching/Research Fellow, Graduate School of Arts & Sciences *Boston, MA, US*
Teaching undergraduate course in data structures using Java, and graduate courses in machine learning, compressed sensing and game theory

MIT Media Lab 9/2016 - 9/2018
Graduate Research Assistant, Synthetic Neurobiology Group *Cambridge, MA, US*
Optical connectomics theory, zebrafish behavior

Institute for Infocomm Research 8/2014 - 7/2015
Research Engineer *Singapore*

INTERNSHIPS AND SHORT-TERM VISITS

Singapore University of Technology and Design 5/2019 - 7/2019
Research Assistant *Singapore*

Advanced Digital Sciences Center 5/2013 - 8/2013
Research Internship *Singapore*

Panasonic R&D Center Singapore 9/2012 - 12/2012
Industrial Attachment Program *Singapore*

Singapore-MIT Alliance for Research and Technology 5/2011 - 8/2011
Undergraduate Research Fellowship Program *Singapore*

TRAINING

Gaussian Process and Uncertainty Quantification Summer School 2020 9/2020

2020 Intelligent Sensing Summer School 9/2020

2020 Telluride Neuromorphic Workshop 8/2020

AI Summer School 2020 by AI Singapore 8/2020

2020 International Conference on Mathematical Neuroscience 7/2020

MIT Brain, Minds and Machines Summer Course, Woods Hole, MA, USA 8/2015

IEEE SPS Winter School on Visual Image Search and Visual Analytics, Singapore 12/2014

HONORS AND AWARDS

Dean's Fellowship, Graduate School of Arts and Sciences, Boston University 2018-2019

National Science Scholarship, Agency for Science, Technology and Research, Singapore 2015

SM3 Scholarship for Undergraduate Study in Singapore, Ministry of Education, Singapore 2010

VOLUNTEERING AND SERVICES

The Thirty-Seventh International Conference on Machine Learning (ICML) 7/2020
Volunteer *Online*

The Eighth International Conference on Learning Representations (ICLR) 4/2020
Volunteer *Online*

TEACHING

CS 542 Machine Learning Summer 2021
Teaching Fellow *Boston, MA, US*

CS 655 Computer Networking Fall 2020
Grader *Boston, MA, US*

CS 542 Machine Learning Summer 2020
Teaching Fellow *Boston, MA, US*

CS 112 Introduction to Computer Science II Spring 2020
Teaching Fellow *Boston, MA, US*

CS 591 C1 Computational Game Theory Spring 2020
Grader *Boston, MA, US*

CS 112 Introduction to Computer Science II Fall 2019
Teaching Fellow *Boston, MA, US*

CS 591 C1 Compressed Sensing and Sparse Recovery Fall 2019
Grader *Boston, MA, US*

CS 542 Machine Learning Spring 2019
Teaching Fellow and Grader *Boston, MA, US*

9.012 Cognitive Science Fall 2017
Teaching Assistant *Cambridge, MA, US*

9.40 Introduction to Neural Computation Spring 2017
Teaching Assistant *Cambridge, MA, US*

PUBLICATIONS

[1] Young-Gyu Yoon, Zeguan Wang, Nikita Pak, Demian Park, Peilun Dai, Jeong Seuk Kang, Ho-Jun Suk, Panagiotis Symvoulidis, Burcu Guner-Ataman, Kai Wang, and Edward S. Boyden. Sparse decomposition light-field microscopy for high speed imaging of neuronal activity. *Optica*, 7(10):1457–1468, Oct 2020.

[2] Young-Gyu Yoon, Peilun Dai, Jeremy Wohlwend, Jae-Byum Chang, Adam H Marblestone, and Edward S Boyden. Feasibility of 3d reconstruction of neural morphology using expansion microscopy and barcode-guided agglomeration. *Frontiers in computational neuroscience*, 11:97, 2017.

[3] Keng-Teck Ma, Liyuan Li, Peilun Dai, Joo-Hwee Lim, Chengyao Shen, and Qi Zhao. Multi-layer linear model for top-down modulation of visual attention in natural egocentric vision. In *Image Processing (ICIP), 2017 IEEE International Conference on*, pages 3470–3474. IEEE, 2017.

[4] Bappaditya Mandal, Rosary Yuting Lim, Peilun Dai, Mona Ragab Sayed, Liyuan Li, and Joo Hwee Lim. Trends in machine and human face recognition. In *Advances in Face Detection and Facial Image Analysis*, pages 145–187. Springer, Cham, 2016.