

Curriculum Vitae

Jason Zhi Liang

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PhD Student, Department of Computer Science

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Education

- 08/2015 - Present** Doctor of Philosophy in Computer Science, University of Texas at Austin.
- 08/2013 - 05/2015** Masters of Science in Computer Science, University of Texas at Austin.
GPA: 3.71/4.00
- 08/2009 - 05/2013** Bachelors of Science in Electrical Engineering and Computer Science, University of California, Berkeley.
GPA: 3.75/4.00

Research Interests

Neural Networks • Deep Learning • Evolutionary Computation • Artificial Intelligence • Machine Learning

Research Experience

- 08/2015 - Present** Member of Neural Network Research Group. Department of Computer Science, The University of Texas at Austin.
Mentor: Professor Risto Miikkulainen.
Working on novel algorithms for evolutionary bilevel optimization and evolution of deep neural network architectures.
- 08/2013 - Present** Member of Robocup 3D Simulation Team. Department of Computer Science, The University of Texas at Austin.
Mentor: Professor Peter Stone.
Improved the localization, locomotion, and kicking behavior of simulated, autonomous soccer playing robots.
- 08/2013 - 05/2015** Masters Student. Department of Computer Science, The University of Texas at Austin.
Mentor: Professor Risto Miikkulainen.
Designed a novel evolutionary algorithm for tuning parameters of other evolutionary algorithms.
- 05/2012 - 08/2013** Undergraduate Research Assistant. Department of Electrical Engineering and Computer Science, University of California, Berkeley.
Mentor: Professor Avideh Zakhor.

Assisted in developing an indoor localization system that uses computer vision algorithms to determine the user's pose based on a single query image.

Paid: 15 Hours / Week

05/2012 - 08/2012 Undergraduate Research Assistant. International Computer Science Institute, University of California, Berkeley.
Mentor: Dr. Eric Friedman.
Analyzed directed network motifs arising in MRI cortical thickness data from patients with Alzheimer's disease and mild cognitive impairment.

02/2012 - 05/2012 Undergraduate Research Assistant. Department of Electrical Engineering and Computer Science, University of California, Berkeley.
Mentor: Professor Dawn Song.
Analyzed common security vulnerabilities that arise from poorly written code for content management systems (CMS).

Work Experience

12/2015 - 01/2017 Intern. Sentient Technologies
Designed a novel evolutionary algorithm for large scale, distributed optimization of architecture and hyperparameters of deep neural networks in the domain image captioning and classification.
Paid: 40 Hours / Week

05/2015 - 08/2015 Intern. Open Source Robotics Foundation
Designed a plugin which runs the Robocup 3D simulation server for the open source robot simulator Gazebo.
Paid: 40 Hours / Week

09/2011 - 12/2011 Intern. Qualcomm
Benchmarked the performance of popular augmented reality (AR) applications and frameworks.
Paid: 10 Hours / Week

Honors / Awards

05/2011 Member of Eta Kappa Nu, honor society for electrical engineering and computer science majors at UC Berkeley.

Publications

1. Liang, Jason, and Risto Miikkulainen. "Evolutionary Bilevel Optimization for Complex Control Tasks.", Genetic and Evolutionary Computation Conference, 2015.
2. Liang, Jason Zhi, et al. "Image-Based Positioning of Mobile Devices in Indoor Environments." Multimodal Location Estimation, Springer Gerald Friedland, Ed (2014).

3. Liang, Jason Zhi, et al. "Reduced-complexity data acquisition system for image-based localization in indoor environments." Indoor Positioning and Indoor Navigation (IPIN), 2013 International Conference on. IEEE, 2013.
4. Liang, Jason Zhi, et al. "Image Based Localization in Indoor Environments." Computing for Geospatial Research and Application (COM. Geo), 2013 Fourth International Conference on. IEEE, 2013.

Computer Skills

Proficient in the following languages: C/C++ • Python • Java • Matlab • Bash • R • Ruby • Latex

Relevant Courses Taken (with Final Grade)

Neural Networks: A

Computer Vision: A

Robotics: A-

Machine Learning: A-

Scalable Machine Learning: A-

Graphical Models: A-

Convex Optimization: A