**CURRICULUM VITAE**

**Name:** Beibin Li

**Position:** Research Fellow in Translational Technologies in Development

Technology and Innovation Lab

Child Study Center, Yale School of Medicine, Yale University

**Tel:** (901) 734-3790 **E-mail:** [beibin.li@yale.edu](mailto:beibin.li@yale.edu)

**EDUCATION**

* Bachelor of Science, Mathematics and Computer Science, University of Michigan, Ann Arbor, MI, 2015.

Course Highlights: Advanced Object-Oriented Programming, Theory of Algorithms, Computer Organization, Theory of Computation, Introduction to Database, Introduction to Computer Security

**EMPLOYMENT**

2015 - present **Research Fellow**, Child Study Center, Yale University.

Advisor: Frederick Shic, Ph.D.

Design eye tracking experiments by using Presentation, SR EyeLink, Eye Tribe, Arduino, etc. Use Matlab, Python, and R to analyze data. Implement virtual reality project using Oculus Rift. Communicate with collaborating implementation sites to coordinate eye tracking experiments.

2014 – 2015 **Instructional Aide**, School of Engineering, University of Michigan. Professor: Seth Pettie, and Grant Schoenebeck

EECS 376 (Foundations of Computer Science). Taught discussion sections on Finite Automata, Context Free Language, Turing Machine, NP problems, etc. Answered questions in online forum and held office hours. Designed section notes, homework and exams, and graded exams for more than 300 students.

2014 - 2015 **Research Fellow**,Transportation Research Institution.

Advisor: Paul Green

Collected experiment data, and used JMP and R to analyze data. Used ISAT to design virtual roads for a driving recognition system experiment. Taught students to use software: Jack, Morae, Cogtool, and IMPRINT to practice human factor analysis.

**AWARDS**

2014 The Mathematical Contest in Modeling (MCM), Honorable Mention

2013 and 2014 University Honor, University of Michigan

2010 Presidential Scholarship, Rhodes College

**PUBLICATIONS**

1. **Beibin Li**, Quan Wang, Erin Barney, Logan Hart, Carla Wall, Katarzyna Chawarska, Irati Saez de Urabain, Timothy J. Smith, and Frederick Shic, “Modified DBSCAN Algorithm on Oculomotor Fixation Identification”, *Eye-Tracking Research and Applications Symposium 2016 (ETRA 2016),* 2016.
2. **Beibin Li**, Quan Wang, Laura Boccanfuso, and Frederick Shic, “Optimality of the Distance Dispersion Fixation Identification Algorithm”, *Eye-Tracking Research and Applications Symposium 2016 (ETRA 2016),* 2016.
3. Quan Wang, Laura Boccanfuso, **Beibin Li**, Amy Yeo-jin Ahn, Claire E. Foster, Margaret P. Orr, Brian Scassellati, Frederick Shic, “Thermographic Eye Tracking”, *Eye-Tracking Research and Applications Symposium 2016 (ETRA 2016),* 2016.

**PRESENTATIONS**

1. **Beibin Li**, Laura Boccanfuso, Stephanie Valencia, and Frederick Shic, “Background Music and Sound Effects in Human-Robot Interaction”, *Northeast Robotics Colloquium 2015*, 2015

**INVOLVED PROJECTS**

NIH U19 MH108206-01 (PI: McPartland, James)

*The Autism Biomarkers Consortium for Clinical Trials*

Role: Researcher

Helped creating eye tracking experiments using SR Eyelink 1000 Plus. Designed a system to measure light conditions using Arduino and TSL2561 sensor. Built and set up eye tracking system with SR Eyelink eye tracker, webcam, DVD recorder, and light meter. Improved eye tracking calibration protocol. Analyze pupillary light reflex and other eye tracking data for children with Autism Spectrum Disorder (ASD).

Simons Foundation 15-004376 (PI: Shic, Frederick, Ph.D.)

Tracking Intervention Effects with Eye Tracking

Role: Researcher

Helped design experiments and counterbalance eye tracking stimuli. Built and tested eye tracking experiments using SR eye tracker. Analyze iPad eye tracking data using Matlab.

Israel Eye Tracking Project

Role: Researcher

Used PsychoPy to design eye tracking experiments and EyeTribe to collect data in Israel. Filter and analyze experiment data with Python and R. This project deploys portable eye tracking experiments for children with ASD outside the United States.

**PAST PROJECTS**

May 2015 StagePlay (Swift)

Designed an iOS application for actors to practice their lines and to collaborate with their partners. Main features: line-by-line display, performance recording, and script editing. Compatible with iPhone and iPad.

Feb. 2015 Course Scheduler (C++)

Completed back-end website design for students to schedule the following year’s courses. Designed and implemented algorithms in PHP, and imported 10,000 courses into SQL database. Coordinated with front-end developers.

Oct. - Dec. 2014 Medieval World Game (C++)

Developed a command line game for creating different characters and buildings. Applied C++ idioms and design patterns (MVC, Composite, factory, etc.) so new features could be added easily.

Sept.– Oct. 2014 Meeting Manager (C++)

Designed a meeting management command line software by using classes for abstraction and encapsulation. Implemented linked-lists, arrays, and strings that behaved like build-in types; used strong exception guarantees. Managed dynamically allocated memory with copy and move construction and assignment.

Mar. 2014 Stock Exchange (C++)

Designed an electronic exchange simulator by using priority queue to store buyers’ and sellers’ bids. Stored stock information using Hash-Table.