Siddhartha Banerjee

Georgia Institute of Technology
RAIL Lab, College of Computing
800 Atlantic Dr NW
Atlanta, GA 30332

Phone: +1 (203) 435-1923
Email: siddhartha.banerjee@gatech.edu
Homepage: http://www.banerjs.com/

Education

2015 — Ph.D. in Robotics. Advised by Dr. Sonia Chernova. *In Progress*.
Georgia Institute of Technology, Atlanta, GA, USA.

2009 — 2013 B.S. Electrical Engineering/Computer Science with Distinction.
Yale University, New Haven, CT, USA.

Employment

Fall 2018 Teaching Assistant for CS7633: Human-Robot Interaction.
Georgia Institute of Technology, Atlanta, GA, USA

Summer 2018 Robotics Software Engineering Intern. Advised by Vivian Chu.
Diligent Robotics, Austin, TX, USA

Summer 2017 Research Intern. Advised by Dan Bohus and Sean Andrist.
Microsoft, Seattle, WA, USA

Fall 2016 Teaching Assistant for CS6601: Introduction to Artificial Intelligence.
Georgia Institute of Technology, Atlanta, GA, USA

2013 — 2015 Software Engineer on Data Team.
Redfin, Seattle, WA, USA

2012 — 2013 Peer Tutor for CPSC 202: Mathematical Tools for Computer Science.
Yale University, New Haven, CT, USA

Summer 2012 Hardware Verification Intern.
Microsoft, Mountain View, CA, USA

Publications

Journals

S. Banerjee, A. Silva, and S. Chernova, "Robot Classification of Human Interruptibility and a Study of Its Effects," in *ACM Transactions on Human-Robot Interaction (THRI)*, 7(2), p. 14, 2018

Conference Proceedings

D. Kent, **S. Banerjee**, and S. Chernova, "Learning Sequential Decision Tasks for Robot Manipulation with Abstract Markov Decision Processes and Demonstration-Guided Exploration," in *18th Int. Conf. on Humanoid Robots*, IEEE-RAS, 2018

S. Banerjee and S. Chernova, "Temporal Models for Robot Classification of Human Interruptibility," in *Int. Conf. on Autonomous Agents & Multiagent Systems*, no. 16. IFAAMAS, 2017, pp. 1350–1359

Workshops

S. Banerjee and S. Chernova, "Efficient Human-Robot Interaction for Robust Autonomy in Task Execution," in *ACM/IEEE Int. Conf. on Human-Robot Interaction Pioneers Workshop*, 2018

S. Banerjee and S. Chernova, "Robots Predicting the Interruptibility of Humans," in *RSS Workshop on Planning for HRI*, 2016

B. Harrison, **S. Banerjee**, and M. O. Riedl, "Learning from Stories: Using Natural Communication to Train Believable Agents," in *IJCAI Workshop on Interactive Machine Learning*, 2016

Awards and Leadership Positions

HRI 2019	Panel Chair, *HRI Pioneers Workshop*
2018 — 2019	Co-chair, Student Activities Committee, *IEEE Robotics and Automation Society*
2017 — 2018	President, RoboGrads, *Georgia Institute of Technology*
2016 — 2017	Social Chair, RoboGrads, *Georgia Institute of Technology*
Q3 2014	Employee of the Quarter, *Redfin*
2012 — 2013	Team Mentor, Formula Hybrid FSAE Team, *Yale University*
2011 — 2012	Vice President, Formula Hybrid FSAE Team, *Yale University*
Summer 2011	Yale Entrepreneurial Institute Fellowship, *Yale University*

Projects

Spring 2016 **Quadrotor Control via Backstepping**. *Class Project*
Verified and simulated the control of a quadrotor through Backstepping to show provably correct control that uses less energy than traditional Inner-loop Outer-loop control.

Spring 2016 **Treeminder: An SMS-based Goal Completion System for the United Way Achievement Club**. *Class Project*
Designed a goal tracking and completion system in partnership with the United Way Achievement Club to help members of at-risk populations avoid homelessness. Conducted usability and feasibility analyses to justify and support the design.

2009 — 2013 **Yale Formula Hybrid FSAE Team**. *Student Organization*
Designed and built formula style gas-electric hybrid car to compete against other schools in an annual national competition. Team awards: Best Hybrid Car (2013), Ford Efficiency Award (2013), Chrysler Innovation Award (2013), GM Best Engineered Hybrid System Award (2010, 2013)

2012 — 2013 **Synchronization and Collective Behaviour**. *Senior Class Project*
Simulated agent-based modeling of multi-agent systems. Explored the role of synchronization and chaos in dynamical systems.

Spring 2012 **Assigning Blame to Self-Driving Cars**. *Class Project*
Surveyed drivers to determine whether blame is assigned to a self-driving car or the human driver using simulations of accidents between self-driving cars with human-driven cars.

Fall 2011 **Design and Fabrication of Simple Data Encryption Standard (S-DES) Encryption/Decryption chip**. *Class Project*
Designed a VLSI chip to perform S-DES encryption/decryption and created CAD models of the chip and its layout in preparation for fabrication. Tested and verified the function of the chip post-fabrication.

Professional Memberships

Institute for Electrical and Electronics Engineers (IEEE)

Last updated: December 9, 2018