Nalini Singh

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Education

Harvard-MIT Division of Health Sciences and Technology, Ph.D. **(Expected) Jun 2022**
Concentration: Computer Science
Relevant Coursework: Statistical Learning Theory, Pathology

Massachusetts Institute of Technology, S.B. **Jun 2017**
Major: Electrical Engineering and Computer Science
Relevant Coursework: Machine Learning, Computer Vision, Bayesian Modeling & Inference, Signals & Systems, Biomedical Signal and Image Processing, Secondary Analysis of Electronic Health Records

Experience

Google, Inc., *Software Engineering Intern (Google Station)* **Jun 2017 – Aug 2017**
- Implemented feature to increase use of public wi-fi at international rail stops (details confidential)
- Project launched externally at 15 Google Stations in November 2017
- Developed across the stack in Java, Javascript, HTML, CSS

IBM Research, *Research Intern (Healthcare Analytics Group)* **Jan 2017 – Feb 2017**
- Designed and conducted feature analyses to determine proteins involved in adverse drug reactions
- Currently authoring journal paper for publication

Nihon Kohden Innovation Center, *Research Intern* **Jun 2016 – Jun 2017**
- Developed classifiers for evaluating relevance of bedside alarms in neonatal intensive care units; ultimately will be used for reduction of false alarms to improve patient care
- Currently authoring journal paper for publication

Charles Stark Draper Laboratory, *Signal Processing, Algorithms, & Software Intern* **Jun 2015 – Aug 2015**
- Developed and implemented computer vision methods for "lost robot" parafoil localization without GPS
- Co-authored conference paper; algorithm currently being used in parafoil flights

MIT Media Lab, *Undergraduate Researcher (Biomechatronics Group)* **Jan 2014 – Dec 2017**
- Led research project to develop biomimetic prosthesis control systems for walking across varied terrains
- Awarded 2nd place oral presentation at EECSCon, MIT's premier undergraduate EECS research conference

Publications

Dever, C., Dyer, T., Hamilton, L., Lommel, P., Mohiuddin, S., Reiter, A., **Singh, N.,** Truax, R., Wholey, L., Bergeron, K. and Noetscher, G., 2017. Guided-Airdrop Vision-Based Navigation. In *24th AIAA Aerodynamic Decelerator Systems Technology Conference*. [Authors listed alphabetically within institution.]

Teaching

Signals, Systems, and Inference, *Teaching Assistant* **Feb 2017 – Jun 2017**
- Taught and planned three weekly tutorial sections; assisted students in office hours and electronically
- Earned a 6.8 rating (on 7.0 scale) for teaching quality

Leadership and Activities

MIT Eta Kappa Nu, *President* **May 2016 – Jun 2017**
- Led 15-person officer team and 70-member organization to support 800+ MIT EECS undergraduates by running department-wide tutoring programs, educational workshops, course evaluations, etc.

MIT TechX – *Blueprint Director* **Sep 2013 – Oct 2014**
- Founded and led organization of Blueprint, Boston's first high school hackathon (300+ attendees)
- Directed outreach efforts for HackMIT, one of the largest college hackathons worldwide (1000+ attendees)

Skills

Python, C++, Java, Javascript, HTML/CSS, Matlab, Mathematica, LaTeX