ANNAMARIE E. BAIR

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EDUCATION

Massachusetts Institute of Technology (MIT)

Candidate for Master of Engineering in Computer Science

June 2019 (expected)

Bachelor of Science in Computer Science and Engineering Minor in Brain and Cognitive Sciences June 2018

RESEARCH

MIT CSAIL Clinical Decision Making Group, Prof. Peter Szolovits

May 2017 - present

- · Performing prediction of drug indication, mechanism of action (MoA), side effect, and more through analysis of expression data and drug structural data.
- · Used machine learning methods to model gene expression data and analyze co-regulated genes.
- · Participated in MITs SuperUROP Program.
- · Work resulted in a poster presentation at the Women in Machine Learning (WiML) workshop.

MIT Interactive Robotics Group, Prof. Julie Shah

September 2015 - April 2016

- · Conducted experiments that assessed situational awareness in human-robot interaction.
- · Performed statistical analysis of experimental results.
- · Work resulted in a publication in The International Journal of Robotics Research (IJRR).

MIT Media Lab, Prof. Eric Klopfer

June - August 2015

- · Developed platform that organizes education standards across 15 countries to help teachers compare curricula with regard to student age and topic area.
- · Wrote Natural Language Processing scripts in Python with NLTK.

MIT Koch Institute, Prof. Daniel Anderson

January - May 2015

- · Assisted with design and creation of siRNA (small interfering RNA) used for targeted drug delivery.
- · Maintained and split cell cultures and assisted with assays.

INDUSTRY

Microsoft

June 2018 - August 2018

Redmond, WA

- · Migrated data quality metrics from SQL to NoSQL database.
- · Improved and refactored existing codebase using C#, U-SQL, and T-SQL.

DriverSoftware Engineering Intern

Software Engineering Intern

June - August 2017

San Francisco, CA

- · Built an API using Python, PostgreSQL, and Flask for a consumer technology company building a platform to give cancer patients access to new treatments.
- · API stores patient information and integrates with internal services to automate ordering of medical diagnostic test kits from a third party vendor.

The New York Times

June - August 2016 New York, NY

Software Engineering Intern

- · Designed and implemented improvements to a mobile website using Javascript, HTML, and CSS.
- · Determined how to improve the user experience of a mobile web app in collaboration with a designer and carried project through the entire development process until the product was deployed to production.
- · Created an iOS prototype for a social feature for The New York Times Cooking App.

TEACHING

MIT Teaching Assistant

September 2018 - present

Introduction to Computer Science and Programming (6.00)

· Teach weekly recitation sections, write problem sets, hold office hours.

MIT Lab Assistant

January - June 2018

Introduction to Computer Science and Programming (6.00)

· Assisted students with problem sets, gave check-offs, debugged problem sets before release.

La Miranda School Instructor

January 2018 Barcelona, Spain

· Developed lesson plans and taught math, coding, physics, biology, and English to 6th - 12th grade students.

MIT Lab Assistant

September - December 2017

Computation Structures (6.004)

· Assisted students with labs, gave check-offs, helped students with quiz preparation.

LEADERSHIP

MIT Class of 2018 Treasurer

October 2014 - June 2018

- · Managed and allocated a \$300,000 budget.
- · Planned events, and study breaks to promote class unity, involvement, and well-being.

Kappa Alpha Theta Chief Recruiting Officer

January 2017 - December 2017

- · Organized Fall Recruitment and led 120 chapter members through preparation and recruitment weeks in the fall.
- · Led several recruitment workshops to prepare members for recruitment. Topics included conversation skills, branding of the chapter, and logistical details.
- · Served as a member of MIT Kappa Alpha Theta Executive board and MIT Panhellenic Recruitment Chairs Board.

PUBLICATION

Gombolay, M., **Bair**, **A.**, Huang, C., & Shah, J. (2017). Computational design of mixed-initiative human-robot teaming that considers human factors: situational awareness, workload, and workflow preferences. The International Journal of Robotics Research, 36(57), 597617. https://doi.org/10.1177/0278364916688255

PRESENTATIONS

Bair, A., McDermott, M., Wang, J., Zhao, W., Sheridan, S., Szolovits, P., Kohane, I., Haggarty, S., Perlis, R. (2018, December 3). Improved Modeling and Analysis of Gene Expression. Poster presented at Women in Machine Learning (WiML) Workshop, Montréal, Canada.

Bair, A., McDermott, M., Szolovits, P. (2018) Improved Modeling and Analysis of Gene Expression. Poster Presented at MIT SuperUROP Poster Session, Cambridge, MA.

SKILLS

Programming: Python, Java, C#, SQL, MATLAB, JavaScript, HTML/CSS

Languages: Spanish (Proficient)