

RYAN KOCH

✉ ryan.koch@tufts.edu
🌐 ryanwk.github.io
📍 Boston, MA
in ryanwkoch/
🔗 ryanwk

Skills

FRONT-END

JavaScript
Angular
HTML5
Bootstrap
HandleBars
CSS3
SASS

BACK-END

Ruby
Rails
AJAX
PostgreSQL
MongoDB
C++
UNIX

RESEARCH

Quantitative & Qualitative Analysis
Conference Presentations
Journal Publications
Interviews
Survey Design
Wire Framing
Mock-ups
SPSS
Excel
R

Awards

Outstanding Research

Fisher College Center for Leadership in Public Service; 2015

Outstanding Student

Fisher College Psychology Department; 2016

Student of the Year

Fisher College Psychology Department; 2013

Education

Tufts University

M.S. Human Factors Engineering Expected 2019
School of Engineering
Medford, MA

Fisher College

B.A. Psychology Magna Cum Laude 2016
Boston, MA

Experience

Nuance Communications (DRIVE) Laboratory

User Experience Research Intern

Cambridge, MA

Jan 2017 to Jun 2017

- Gained familiarity with the automotive industry while working at the Design Research Innovation and in-Vehicle (DRIVE) lab
- Conducted early concept research of natural language processing products centered around multi-modal in-vehicle experiences
- Reviewed a usability study for Honda
- Designed online surveys with Survey Monkey
- Analyzed survey data with Excel

Minds in Technology | Machines in Thought (MIT2) Laboratory

Human Robot Interaction (HRI) Research Assistant

Orlando, FL

Sep 2016 to Jan 2017

- Collaborated with Dr. Peter Hancock's graduate student Dr. Tracy Sanders
- Wrote the method sections of 2 publication efforts concerning HRI
- Contributed to a publication submitted to the Journal of Human Factors and Ergonomics Society
- Developed a conference presentation regarding trust in HRI; presented at APS Boston

Massachusetts Institute of Technology (MIT) Lincoln Laboratory

Human Factors Research Assistant

Lexington, MA

May 2016 to Sep 2016, Jul 2015 to Sep 2015

- Supported the development and administration of a heuristic evaluation to collect data in support of a usability test on a project concerning law enforcement video analytic software
- Wrote an executive summary of law enforcement best practices
- Assisted in the creation of a serious game that was used by subject matter experts within a focus group to collect data in support of a utility analysis on public health surveillance software

Projects

E-Commerce Website

2017

- Operated as a SCRUM master and developer on a 4 person team
- Built a fully functional full stack e-commerce website using JavaScript, Express, and MongoDB
- Programmed functionality that allows a user to view products, store products in a shopping cart, and view order history, and purchase items with a credit card
- Implemented a noSQL database using Mongoose.
- Deployed complete production web app with Heroku.

Fitness Tracker

2017

- Manufactured a full-stack, single page fitness tracking application built from scratch utilizing Ruby, Rails, JavaScript, jQuery, AJAX, HTML, CSS, SASS, and Bootstrap.
- Programmed functionality that allows users to track exercises, date, and weight used while working out.
- Implemented a PostgreSQL database using Rails
- Deployed complete production web app with Heroku.

Serious Game

2016

- Researched and collated information necessary for the game scenarios
- Generated fictitious data used in the game
- Conducted A/B testing on various game scenarios and data used in the game