RYAN KOCH

Seeking employment beginning May 15, 2019 in the machine learning and product development space

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617-823-9510
Boston, MA

Skills

PROGRAMMING
JavaScript
HTML
CSS
C++
Python

USER EXPERIENCE (UX)
Quantitative & Qualitative Analysis
Conference Presentations
Interviews
Survey Design
Wire Framing
Mock-ups
Competitive Analysis
Task Analysis
Data Analysis
Prototyping

MACHINE LEARNING [NOVICE]
pandas
matplotlib
NumPy
Scikit-learn
Keras
TensorFlow
Classification
Regression
Image Recognition
Deep Neural Networks

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

Certifications

Six Sigma Black Belt

Interim Secret Security Clearance

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

Google — Oakland, CA
Applied Machine Learning Intensive — Feb. 2019 to May 2019
- Selected from over 600 applicants as one of a 21-person cohort to take part in a ten- week, project-based Machine Learning pilot program fully funded by Google at Mills College
- Analyze and clean visual data, and develop the ability to differentiate between machine learning models, diagnose modeling issues, and adjust input data accordingly
- Discern when machine learning is the optimal approach, versus other solutions
- Cultivated proficiency in SQL and Python
- Understand the ethical use of Artificial Intelligence and how to identify bias
- Attend weekly professional development workshops in topics covering technical presentation skills, giving and receiving feedback, and project management

Glass Social Media — Philadelphia, PA
Co-Founder & UX Researcher — Jan. 2018 to Oct. 2018
- Spearheaded UX research by employing methods including a focus group, user interviews, journey mapping, and usability tests during across low, medium and high fidelity prototypes
- Implemented a 'Build', 'Measure', 'Learn' philosophy while placing emphasis on validated learning to effectively allow data to drive development and design decisions through multiple version releases
- Executed multiple development, marketing, and user testing sprints

Nuance Communications (DRIVE) Laboratory — Cambridge, MA
User Experience Research Intern — Jan. 2017 to June 2017
- Immersed myself in the automotive industry while working at the Design Research Innovation and in-Vehicle (DRIVE) lab
- Augmented early concept research of natural language processing products centered around multi-modal in-vehicle experience
- Designed online surveys with Survey Monkey
- Analyzed survey data to provide insights to senior staff

Massachusetts Institute of Technology (MIT) Lincoln Laboratory — Lexington, MA
Human Factors Research Assistant — May 2016 to Sept. 2016, July 2015 to Sept. 2015
- Executed a heuristic evaluation to collect data complementing a usability test on law enforcement video analytic software
- Developed an executive summary of law enforcement best practices
- Facilitated the creation of a serious game implemented in a focus group to collect data for a utility analysis on public health surveillance software

Relevant Course Work

Advanced Statistics and Probability Theory — 2017
- Learned Bayesian and Frequentist perspectives on probability theory, statistical inference, analysis of variance, nonparametric analysis, regression, Markov Chain Monte Carlo algorithms, Signal Detection Theory, t-tests, ANOVA's
- Lab work focused on reinforcing in-class concepts using R and SASS

Human-Machine System Design — 2017
- Studied information processing, decision making, reaction times, Signal Detection Theory, computer-interface design, and auto/semi-automated systems.
- Reinforced topics by programming and building a Lego Mindstorm Robot.

Human Factors in Product Design — 2017
- Identified and refined user requirements, employed project management principles, and studied user-centered design solutions for various assignments regarding product and system development
- Prototyped, designed, and tested a user interface for KCUS Boston to alert bus drivers of cyclists to mitigate bus-cyclist collision scenarios

Publications

Journal Publications
Sanders, T. L., Kaplan, X., Schwartz, M., Koch, R., Hancock, P. A. (2017, submitted). The Relationship Between Trust and Use Choice in HRI. The Journal of Human Factors.