

Katie House

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413-800-5542

EDUCATION

University of Massachusetts Amherst

Master of Science in Computer Science, Concentrating in Data Science; GPA: 3.7

Jan 2017 – Dec 2019

Amherst, MA

Northeastern University

Bachelor of Science in Industrial Engineering, Minor in Business Administration; GPA: 3.8

Sep 2012 – May 2017

Boston, MA

WORK EXPERIENCE

Research Assistant/Programmer

Reich Lab - University of Massachusetts

Apr 2018 – Present

Amherst, MA

- Deployed a Python module that interfaces with a web app that stores over 23 million forecast instances
- Contributed to an R Package, ForecastFramework, with an implementation of a SARIMA forecasting model
- Presented a poster at a Models of Infectious Disease Agent Study (MIDAS) conference on forecasting software

Data Science for the Common Good, Graduate Intern

Center for Data Science - University of Massachusetts

Jun – Aug 2018

Amherst, MA

- Predicted Amherst parking lot occupancy from over 20,000 images with deep learning methods (CNN)
- Designed an interactive visualization tool for parking utilization from machine learning predictions with D3.js
- Presented to Amherst government officials to guide the town's decision making for parking policies

Engineering Co-op

Hasbro - Playskool Heroes

Jan – Aug 2016

Pawtucket, RI

- Initiated a process to automatically query business intelligence data for engineering reports
- Led a team of interns to pitch a new product for the Engineering Product Innovation Challenge (EPIC)

Investment Strategy Co-op

Credit Suisse HOLT

Jan – Jun 2015

New York, NY

- Analyzed stock performance metrics of over 20,000 companies' financial report data with quantitative analysts
- Built a back-test loader in SQL and VBA that aggregated and visualized stock performance metrics
- Recognized for data analytics research in a published Credit Suisse Corporate Insights capital allocation paper

Engineering Co-op

Johnson & Johnson - DePuy Synthes

Jan – Dec 2014

Raynham, MA

- Created an Access database for planning, scheduling production orders and backorder tracking
- Received a Gold (May 2014) and a Platinum (Dec 2014) ECORE Award for project completion and performance

PROJECTS

Microsoft Azure and UMass Industry Mentorship Program

Jan – May 2019

- Trained supervised machine learning models on Azure to classify commercial blocks and detect hate speech
- Wrote two Jupyter Notebooks that showcase Microsoft Azure's Machine Learning cloud computing capabilities
- Presented to senior Microsoft data scientists on Azure Machine Learning Services implementations

HackHer413 Founder and Director

May 2018 – Apr 2019

- Founded the first all-female and non-binary student hackathon in Western Massachusetts
- Raised over \$50,000 from 25 sponsors by promoting our message of investing in diversity
- Empowered over 300 historically marginalized participants and inspired them to pursue technology

SheHacks and TechTogether Hackathon Winner

Jan 2018 & Mar 2019

- Won a total five awards in two years competing with over 800 hackers for DeepCheck and Audie the bear
- Created Audie, an NLP embedded smart bear to detect patient sentiment and improve childrens' hospital visits
- Developed DeepCheck, an Azure AutoML classification model to make firearm background checks more robust

PROGRAMMING SKILLS

Languages: Python, SQL, R, JavaScript, HTML, CSS **Technologies:** Scikit-learn, Azure, D3, \LaTeX , Git