

# Katie House

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katiehouse3@gmail.com

413-800-5542

## EDUCATION

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### University of Massachusetts Amherst

Jan 2017 – Dec 2019

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

*Amherst, MA*

### Northeastern University

Sep 2012 – May 2017

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

*Boston, MA*

## WORK EXPERIENCE

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### Research Assistant/Programmer

Apr 2018 – Present

*Reich Lab - University of Massachusetts*

*Amherst, MA*

- Presented a poster on forecasting at the Models of Infectious Disease Agent Study (MIDAS) conference
- Contributed to an R Package, ForecastFramework, with an implementation of a SARIMA forecasting model

### Technology Development Program Intern

Jun – Aug 2019

*Optum - Data Analytics Team*

*Boston, MA*

- Deployed a collaborative filtering recommendation algorithm in Python for an innovation sprint
- Built with a full-stack PostgreSQL, React, Node and Express web app for Fenway Health
- Improved Fenway Health's psychotherapy waitlist intake process from 3 days to 30 minutes

### Data Science for the Common Good, Graduate Intern

Jun – Aug 2018

*Center for Data Science - University of Massachusetts*

*Amherst, MA*

- Predicted Amherst parking lot occupancy from over 20,000 images with deep learning methods (CNN)
- Presented parking lot insights to Amherst government officials impacting a town of 37,000 residents

### Engineering Co-op

Jan – Aug 2016

*Hasbro - Playskool Heroes*

*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

Jan – Jun 2015

*Credit Suisse HOLT*

*New York, NY*

- Analyzed stock performance metrics of over 20,000 companies' financial report data with quantitative analysts
- Recognized for data analytics research in a published Credit Suisse Corporate Insights capital allocation paper

### Engineering Co-op

Jan – Dec 2014

*Johnson & Johnson - DePuy Synthes*

*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

## RELEVANT EXPERIENCE

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### 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 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 children's hospital visits
- Developed DeepCheck, an Azure AutoML classification model to make firearm background checks more robust

## PROGRAMMING SKILLS

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**Languages:** Python, SQL, R, JavaScript

**Technologies:** Scikit-learn, Azure, Spark, React, Pandas, Git