Loc **Trinh**

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Experience

Yelp | Software Engineer

05/2017 – Present | San Francisco, CA

- Worked on Yelp's restaurant relevant ranking model and helped improve the learning to rank framework.
- Implemented time sensitive signals along with categorical personalization features for the learning framework.
- Helped improve online traffic CTR near 1% for 30M daily restaurant queries.

MIT Learning and Intelligent Systems | UG Researcher

07/2016 – 06/2017 | Cambridge, MA

- Exploring heuristic search, suboptimal search, and anytime search algorithms to build motion planning and execution system.
- Applying supervised and reinforcement learning techniques to help robot learn basic primitive skills such as pushing a block or screwing on a bottle cap.
- Analyzing the effect of handcrafted features vs. NN generated features on the accuracy and stability of learned models.

MIT Natural Language Group | UG Researcher

01/2015 – 10/2015 | Cambridge, MA

- Implemented a Naive Bayes learning system to classify English and Chinese news articles on mentionings of harmful food contaminants.
- Designed a system to scrape, retrieve, and store recent world news from online resources, such as CNN, BBC, and Xinhua.

MIT EECS Department | Lab Assistant

01/2015 – 05/2015 | Cambridge, MA

- Tutored and assisted MIT students in 6.01 Intro to EECS weekly design labs and software labs.

Education

Massachusetts Institute of Technology

Expected Graduation: **2018** | Current GPA: 4.9

- S.B. in Computer Science and Engineering
- M.Eng. in Computer Science
- Minor in Mathematics

Relevant Coursework

Machine Learning

- 6.008 Inference Algorithms
- 6.819 Computer Vision
- 6.864 Natural Language Processing
- 6.867 Graduate Machine Learning
- 6.882 Bayesian Modeling and Inference
- 9.520 Statistical Learning Theory

CS/Mathematics

- 6.005 Software Engineering
- 6.006 Intro to Algorithms
- 6.046 Design & Analysis of Algorithms
- 18.06 Linear Algebra
- 18.200A Discrete Applied Mathematics
- 18.600 Probability & Random Variables

Projects

racecar | C++, Python, ROS - Autonomous AI

Spring 2016

- Worked in a team to develop and program an RC racecar to self-drive in the MIT tunnels
- Ultilized advance sensors such as laser range finder, ZED stereo camara, structure 3D camera, and IMU to self-navigate.
- Implemented both full-scale SLAM approach and reactive approach.
- Won 2nd place in the final grand challenge.

battleshipAI | Python - Probability & Graphics

Summer 2016

- Programmed 3 different bots to play the game Battleship with strategy ranging from complete randomness to maximum likelihood.
- Probabilistic approach yielded an average 44 moves made per board, ~50 moves improvement over complete randomness and ~15 moves improvement over classical playstyle.

faceRecognition | Python - Machine learning & sci-kit

Fall 2015

- Programmed an app in Python to video capture and detect friends' faces using the Sci-kit learning library.
- Improved program's accuracy using Randomized SVD decomposition to construct eigenfaces.
- Succeeded in recognizing familiar faces while failing to detect and extract faces from natural pictures.

langHelper | Web - MEAN stack & UI design

Summer 2015

- Designed an online learning web application that helps user learn the syntactic differences between programming languages, such as those between C++, C, Java, Python, Javascript, and more.
- Improved application functionalities with AJAX content, MongoDB query, and mobile responsiveness.

Technical Skills

Data Science

- Python, Numpy, Pandas
- Scikit, Tensorflow
- Apache Spark
- Java, JUnit, Git

Web Development

- HTML, CSS, Bootstrap
- Django, DRF
- Node.js, MongoDB
- Adobe Photoshop

Electronic Design

- Arduino/Teensy
- Raspberry PI
- Soldering
- Use of test equipment

Leadership

Simmons Hall Officers |Tech Co-Chair 2016

- Webmaster for dorm website and provided tech assistant for +350 residents within Simmons Hall.
- Co-designed the new Simmons DB.

Simmons Hall Officers | EE Co-Chair 2015

- Headed the EE Laboratory and managed electronic tools and soldering equipments, providing a safe and convinience working environment for lab users.

Activities

- Sailing
- Snowboarding
- Hiking & Camping
- Kayaking
- Swimming