SRIKHAR PADMANABHAN

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EDUCATION

University of Michigan, Ann Arbor, MI   Aug 2019 – May 2022 (Expected)
- *Bachelors in Science, Engineering (B.S.E)*
- Major*: Computer Science*
- GPA: 3.696
- Relevant Courses Taken: Introduction to Data Structures, Artificial Intelligence, Theory of Computer Science, Computer Architecture, Algorithms, Self-Powered Wireless Systems, Electricity and Magnetism, Discrete Math, Differential Equations

RELEVANT WORK EXPERIENCE

True Lark (Remote), Palo Alto, CA, *Part Time Developer*   May 2020 – Present
- True Lark is an AI powered human-like business assistant which provides customer interactions and webchat solutions.
- Implemented a dictionary-based lookup utility to search through a list of messages, that was incorporated into the sequence labeler and has demonstrated significant improvement in the training and testing accuracy at the early stages.
- Helped integrate the labeler into production using **Tensorflow Servings** and **Flask,** allowing users to access the predictions of the sequence labeler
- Ran experiments on the labeler such as removing various layers and compared the performances of these infrastructures as part of the process of drafting the documentation necessary to apply for a patent.
- Languages: **Python**; Frameworks: **Keras**, **Tensorflow**

OpsCruise, Mountain View, CA, *Front-End Software Intern*   June – July 2018
- OpsCruise is an open source platform that ensures high performance of cloud based applications.
- Created a tool to visualize geospatial data using **Sankey diagrams** and **D3.js**.
- Languages: **HTML, JavaScript**

ACADEMIC PROJECTS

Reinforcement Learning: *Artificial Intelligence*   Mar – Apr 2021
- Implemented a version of reinforcement learning, Q-learning, to solve a treasure hunt map without prior knowledge of the model and its rules
- Determined the policy at each state using the ideas of exploration, episodes, reward, discount and learning rate.
- Compared performances of Q-learning to other variations of reinforcement learning such as value iteration and policy iteration
- Development Environment: **Python**

Identifying Piazza Posts' Labels: *Programming and Introduction to Data Structures*   Nov – Dec 2019
- Developed an algorithm to detect labels of new Piazza posts.
- Implemented a machine learning based classification model using Bag of Words, term frequency, and inverse document frequency by utilizing binary search trees and dictionaries.
- Development Environment: **C++**

Arduino: *Self-Powered Wireless Systems; Autonomous Robot*   Apr 2020
- Built an autonomous robot from the SparkFun Toolkit using a breadboard, motor driver, ultrasonic sensor and gear motors, connected through a breadboard and Redboard.
- Optimized the code provided such that the robot would reverse and turn right when within 15 cm of an obstacle.
- Programming Environment: **Arduino**

PROFFESIONAL DEVELOPMENT

Machine Learning, *Andrew Ng*   Dec 2019
- Implemented various supervised and unsupervised machine learning algorithms such as logistic regression and KMeans clustering in Octave/MATLAB.
- Applied these learning algorithms to computer vision, text understanding through the examination of case studies.
- Languages: **MATLAB, Python**

SKILLS

C++, Python, MATLAB, HTML, Java, Keras, Tensorflow, Rust, Algorithms

OTHER AWARDS

Bausch & Lomb Honorary Science Scholarship, University of Michigan Dean's List, University of Michigan Honors