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: 3.746
- Relevant Courses Taken: Data Structures, Artificial Intelligence, Theory of Computer Science, Computer Architecture, Algorithms, Self-Powered Wireless Systems, Discrete Math, Differential Equations, Computer Vision, Compilers, Machine Learning

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 documentation
- 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 that solves treasure hunt maps without 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++**

Image Classification: *Machine Learning* — Sept 2021

- Utilized Convolutional Neural Networks (CNNs) and machine learning principles to classify images of animals.
- Explored supervised pretraining, subset of transfer learning, in order to improve classification accuracy and precision.
- Applied data augmentation, rotations and color-shifts, to enhance the training data and improve the robustness of the model
- Programming Environment: **Python, PyTorch**

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, Octave**

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