# ACHYUTHA BHARADWAJ

**Apt #7, 1137 E Orange St, Tempe, AZ - 85281**

@ asbhara2@asu.edu   📞 (480) 859-2449   in linkedin.com/in/achyutha-bharadwaj/   ⚙ achyuthabharadwaj.github.io

## SUMMARY

Dedicated professional with strong analytical and conceptual problem-solving abilities as well as the necessary communication, organizational and time management skills to take on any task and exceed expectations.

## EXPERIENCE

### Member of Technical Staff - Intern

**VMware, Inc.**

📅 May 2018 – Aug 2018     📍 Atlanta, Georgia

- Reduced 25% database access by creating a Cacheable layer and cached database calls to avoid multiple database requests.
- Refactored Windows Management Services code to achieve high scalability and maintainability by using efficient Design Patterns and SOLID principles.

### Member of Technical Staff - II

**VMware, Inc.**

📅 Jul 2014 – May 2017     📍 Banglore, India

- Worked as ASP .NET Full stack Web developer part of Windows Management Services team.
- Worked closely with UX/UI team to create a seamless and visually pleasing user experience.
- Developed products that provide the ability to quickly enroll Windows devices in an enterprise environment, allow System administrators to authorize and authenticate devices with certificates, configure and update device settings over-the-air, enforce security policies and compliance, secure mobile access to corporate resources, and remotely lock and wipe managed devices.
- Filed patent "Operating System Update Management for Enrolled devices" (US20180173517A1) on July 17, 2017.

## SKILLS

C#, Python, Java, C, C++
HTML5/CSS3, JavaScript, Jquery
ASP .NET, RESTfull API
Tensorflow, Keras
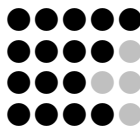
## EDUCATION

### Master of Computer Science

**Arizona State University**

📅 Aug 2017 – Present     📍 Tempe, Arizona

Expected Graduation: May 2019.

## HACKATHONS

### Goodie Hack[athon] - HackCancer

**Goodie Nation**

📅 June 2018     📍 Atlanta, Georgia

- Volunteered as ASP .NET Full-stack web developer at Summer Hackathon by Goodie Nation to address the current health disparities, especially to help Cancer patients.
- CEED, a social network we developed for cancer patients to interact and keep track of their medicines, diet, exercises, etc, was awarded Most Complete Product, competing against 13 teams.

## PROJECTS

### Active SLAM and Path Planning for Mobile Robot Navigation

- Built an agent to explore and map a partially mapped indoor robot environment.
- Used Active SLAM approach for goal state selection in a real-world environment.
- Incorporated recovery mechanisms and a fine-tuning parameter for better accuracy and reduced computational time.

### Analysis of a Reinforcement Learning strategy: Proximal Policy Optimization

- Built an agent that learns to play Atari's Pac-man game using Reinforcement learning.
- Used OpenAI gym environment and its observation/reward model to compare PPO algorithm with different Reinforcement Learning algorithms.
- Introduced new strategies to improve the performance such as, Max-pooling, Random Walk, etc. to help learn faster.

### Stock Market Prediction using Sentiment Analysis of Tweets

- Implemented web crawlers to extract Tweet data and Stock Market Price.
- NLP techniques like Tokenization, Stop-word-removal, Stemming are used to perform language modeling and Sentiment Analysis on Twitter data.
- Compared predictions of stock price fluctuations from different Machine learning techniques such as SVM, Regressions, Deep Networks,etc.
- The ML models predicted the prices most accurately when Topic Modeling was used. Considering past 5 days of tweet sentiments, we were able to predict change in stock prices with close to 70% accuracy.