# Vivek Bhave

279, Amherst Road, Apt. 9, Sunderland, MA 01375
vbhave@umass.edu | (413) 433-6842 | www.github.com/Vivbhav | www.linkedin.com/in/vivbhave

## EDUCATION

**University of Massachusetts, Amherst** MS, Computer Science                    May 2021 (expected)
Coursework: Neural Networks, Machine Learning, Systems for  Data Science
**College of Engineering, Pune** B. Tech, Information Technology                    May 2019
Cumulative GPA - 8.65 / 10 (Placed in the top 15% of my class)

## WORK EXPERIENCE

**Schlumberger, Pune** - Mobility Solutions Developer Intern                    May 2018 - Jul. 2018
Project: Mobile application to track time-series of feedback metrics.
Focus: Cross Platform Application Development using C# and Xamarin framework
- Developed Android application that enabled employees to record feedback during team meetings
- Backend server side logic implemented in C# on the Azure cloud stack.
- Anonymized data stored in CouchBase instance for Time Series Analysis and to generate aggregated reports.

**COEP Satellite Team**                    Oct. 2015 – Apr. 2019
Satellite Mission: To measure charged particle densities while performing Orbit Maneuvering
Focus: Onboard Computer Subsystem and Communication Subsystem
- Designed, Implemented and Maintained the tracking software for Satellite Ground Stations using Python
- Designed and Developed from scratch an Onboard File System (in C) to account for space constraints
- Programmed Microcontrollers and IC Interfaces IC using standard protocols like SPI, UART

## PROJECTS

**Image Classification using Convolutional Neural Networks and Natural Language Processing**      Sep. 2019 (current)
- Trained CNN to tag images according to the image setting environment and objects present in an image
- Improved CNN Accuracy using Frequency-based approaches to find highly correlated image tags by 3%

**Creation of a Web Search Engine using HDFS and Spark**                    Sep. 2019 - Oct. 2019
- Created a single node HDFS to store all UMass webpages
- Used Spark to create an inverted index and RocksDB to handle freeform text search queries

**Virtual Personal Assistant**                    Jan. 2018 - Apr. 2018
- Developed a desktop application applying Python NLTK to parse natural language input
- Worked with Google Calendar, Gmail, YouTube RESTful API's and PyGTK Library

**Fantasy Cricket League**                    Aug. 2017 - Nov. 2017
- Created a web application, using MySQL database and Flask Framework (Python) for business logic
- Wrote automated scripts using BeautifulSoup library to scrape data and assign points to players

## PUBLICATIONS

**International Astronautical Congress**, Mexico                    Sep. 2016
*'Design and Development of a Real time On Board Computer System for an actively stabilized Nano Satellite'*

## TECHNICAL SKILLS

**Languages:** C, C++, Java, Python, C#
**App Development**: Xamarin                    **Databases:** MySQL, CouchBase, RocksDB
**Web Development:** HTML, CSS, Javascript, RESTful API, Flask Framework
**Other Skills:** Machine Learning, Neural Networks (CNNs, RNNs, LSTM), x86 assembly

## LANGUAGES

English, German, Hindi, Marathi