aghadge@umass.edu
linkedin.com/in/ajinkyaghadge

AJINKYA GHADGE

(413) 522-5217
ajinkyaghadge.github.io

EDUCATION

University of Massachusetts Amherst — Amherst, MA
College of Information and Computer Sciences — **Expected Graduation May 2021**
Master of Science in Computer Science. GPA: 3.77/4.00

Shivaji University — Kolhapur, India
Bachelor of Technology in Computer Science and Engineering. GPA: 3.86/4.00 — **Jul 2012 - May 2016**
Awarded Certificate of Merit and Scholarship

EXPERIENCE

Freelance Software Engineer — **Research Centre Imarat, Hyderabad** — **Apr 2018 – Nov 2018**
Research Project

- Developed a Python program that increased the frames captured per second(fps) by 370%
- Created a dataset from Terabytes of Infrared and RGB image data for object detection and tracking by using suitable preprocessing, synchronizing, and annotation used by over 5 teams
- Created RESTful Web Application using the Python-Flask framework for deploying Caffe model
- Developed Linux device driver for the Nvidia Jetson TX2 platform, for a PCIE FPGA

Software Engineer — **Persistent Systems, Pune** — **Nov 2016 – Feb 2018**
Forex Settlement and Netting

- Developed a Java CLI tool used by over 50 testers to orchestrate real-world FOREX transactions
- Prototyped Test-Driven Development System in Java which performed Full-Stack regression testing using Jenkins, Appium, RestAssured, Junit, Maven and Selenium Grid that led to the adoption of CI/CD in the project
- Improved fault tolerance and scalability by migrated existing XML over HTTPS inter-process communication to a Message Queue in Java for over a large amount of transactional data
- Refactored Java code to run on a grid for distributed and concurrent execution of test scenarios achieving a reduction in the test effort by 48%

Python Consultant, Intern — **Harman International, Pune** — **Sep 2016 – Nov 2016**

- Developed Python interface to replace legacy commands in a leading 3D modeling software. Used profiling and foreign function interfacing for interfacing and improving performance

PROJECTS

- **Scene Parsing and Natural Language Processing** bit.ly/2umYVvx — **Oct 2019 – Dec 2019**
  Can a list of objects present in a scene, be used to predict the type of scene (office, kitchen, patio, restaurant)? Used image segmentation techniques, TF-IDF and Neural Networks
- **Statistical Analysis of Presidential Campaigns in Massachusetts for 2016-19** bit.ly/2RdBOux
  Statistics Course Project — **Oct 2019 – Dec 2019**
  How does Massachusetts vote? Which demographics really finance the elections? Used data pre-processing, statistical tests, regression and visualization as an answer
- **Evaluation of Energy-Efficient Devices and CNN Architectures for Real-Time Inference** bit.ly/2T6aIXj
  Freelance Project — **Dec 2018 – Jun 2019**
  What CNN architectures work with optimal detection/classification performance and power consumption at more than 24FPS on certain embedded devices? Developed a rubric matrix for the same
- **License Plate recognition using Raspberry Pi** bit.ly/2mo6AoQ — **Jul 2016 – Aug 2016**
  Prototyped license plate recognition system using Google Vision API and Python Regular Expressions

TECHNICAL SKILLS

- Python (3 years), Java (4 Years), SQL (4 Years), Linux (3 years), C++, GIT