Soham Ghormade

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SKILLS

Programming Languages: Proficient : C#, C++ Academic Experience :Python,
Open Source Libraries : sklearn, OpenCV , OpenAIGym   **Operating Systems** :Academic Experience :Linux
Deep Learning Frameworks:TensorFlow, Keras   **Open Source Contributions**: Apollo

EDUCATION

Master of Science in Computer Science(Part-Time)   **Anticipated Graduation Date:** Aug 2021
Georgia Institute of Technology, Atlanta, GA   Current GPA:4.00/4.00
Courses taken
Machine Learning, Computer Vision, Computational Photography, Robotics:AI Techniques

Master of Science in Mechanical Engineering   Dec 2014
Stony Brook University, Stony Brook, NY   Overall GPA:3.73/4.00

Bachelor of Engineering in Mechanical Engineering   May 2013
University of Mumbai, Mumbai, India   Percentage: 75 %(First Class)

EXPERIENCE

Software Developer II, ANSYS Inc., Pittsburgh, PA   Oct 2017 - Present
- Refactor existing simulation application to enable better integration with geometry application.
- Create a clean API with minimum dependencies ,organized interfaces into independent components which can be packaged for re-use ,enable ability to switch individual components of the application.
- Minimize impact to regressions and API breakages by systematically deprecating methods,
- Apply clean architecture and SOLID principles especially dependency inversion principle.
- Mentor co-ops and interns in their work assignments and shortlist candidates for on site interviews.

Software Developer I, ANSYS Inc., Pittsburgh, PA   Jul 2015-Oct 2017
- Fixed customer defects as well as hang issues to improve overall user experience.
- Included unit tests instead of regressions along with defect fixes to prevent future issues.
- Served as the team's subject matter expert for localization of the product.
- Investigated performance profiles to track down performance degradation hotspots.
- Coordinated communications and served as primary point of contact for one of the teams we work with.
- Tools Used: C#, C++, Python, Git, TFS

PROJECTS

Digit classification and detection using Convolutional Neural Networks   Dec 2019
- Applied transfer learning on pretrained VGG16 to correctly classify digits in image and video.
- Detected digits using Non Maximal Suppression and sliding window technique.
- Trained on Street View House Numbers dataset to obtain test accuracy of 96%.
- Tools used: TensorFlow, Keras, Python

Localization projects   Aug 2019
- Implemented Particle filter and Kalman filter algorithms to detect pedestrians in images.

Painterly rendering   Mar 2019
- Replicated results in research paper by generating painter-like images and videos from photos and videos.
- Implemented b-spline and bezier curve algorithms to render strokes similar to the strokes of a painter.
- Tools used: NumPy, OpenCV, Python