**Soham Ghormade**

Bridgeville, PA (631)-687-9129 <https://ghormadesoham.github.io>

**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](https://github.com/ApolloAuto/apollo/pulls?utf8=%E2%9C%93&q=+is%3Apr+author%3ASohamGhormade+)

**EDUCATION**

**Master of Science in Computer Science(Part-Time) Anticipated Graduation Date:** May 2022

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