

Soham Ghormade

Bridgeville, PA

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<https://ghormadesoham.github.io>

SKILLS

Programming Languages: Proficient : C#, C++ Academic Experience :Python,

Open Source Libraries :OpenCV ,NumPy

Deep Learning Frameworks:TensorFlow, Keras

Operating Systems :Academic Experience :Linux

Open Source Contributions: [Apollo](#)

EDUCATION

Master of Science in Computer Science(Part-Time)

Georgia Institute of Technology, Atlanta, GA

Anticipated Graduation Date: May 2022

Current GPA:4.00/4.00

Courses taken

Computer Vision, Computational Photography, Robotics:AI Techniques

Master of Science in Mechanical Engineering

Stony Brook University, Stony Brook, NY

Dec 2014

Overall GPA:3.73/4.00

Bachelor of Engineering in Mechanical Engineering

University of Mumbai, Mumbai, India

May 2013

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 interview.

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