SHIVAM SWARNKAR

(C) XXX-XXX-XXXX | XXXXXX@XXX.XXX | shivamswarnkar.github.io | github.com/shivamswarnkar

Education

New York University, Tandon School of Engineering, – New York, NY
Bachelor of Science, 2018 **GPA: 3.76 (**Dean's list & University Honors Scholar)
Major: Compute Science and Engineering **Minor:** Business Studies (CAS & Stern)

Relevant courses: Artificial Intelligence, Machine Learning, Deep Learning, Neural Network Computing, Parallel Computing Algorithm Design and Analysis, Software Eng., Computer Architecture, Operating System.

Technical Skills & Tools

- Python, C++/C, MATLAB, Java, Unity3D (C#), Arduino/Flora/BS2
- Machine Learning and Deep Learning (Familiar with Scikit-learn, Tensor Flow, Numpy, Matplotlib, Pandas)
- Parallel Computing (Familiar with MPI, OpenMP and CUDA)

Projects

Online Path Finding Algorithm, Spring 2017
A Team project to develop, design, implement and analyze two new path finding algorithms based on Soft Subdivision Search algorithm. Also implemented GUI to visually control environment and analyze algorithms. Algorithms were tested with a MATLAB disk robot simulation.

US-Election2016-Analysis, Fall 2017
A personal project to analyze county results of 2016 US Election with various demographic features like population density, age, education and etc. Used subset regression to analyze and find patterns. Also compared prediction accuracies of Linear Regression model and fully connected neural network layers model.

GitSync, Spring 2018
A Team project to build a plugin for Sublime TextEditor which makes Git more intuitive and easy to use for beginners. Instead of memorizing terminal commands, users can easily use main features of Git with simple keyboard shortcuts and menu buttons. It was implemented using Python 3.5

Algo-Analysis, Spring 2016
A personal project to help students, learning AI algorithms, to visually see how various AI algorithms work. Implemented a graphical interface in Java, which lets user build a map (of any size with obstacles, start position and goal position) and select an algorithm for path finding (A*, Hill-Climbing, BFS & DFS). System then visually show user how algorithm explores the map to reach the goal.

Work History

Teaching Assistant **[Fall 2016, Fall 2015]**
CSE Department at NYU – Brooklyn, NY
Taught procedural problem solving and programming with Python. Conducted Recitations, prepared exam questions, graded homework and held office hours for classes of more than 60 students.

Course Assistant **[Spring 2017]**
CSE Department at NYU – Brooklyn, NY
Helped in designing coursework (exam questions, homework, mini project and in-class activities) for Intro to CS class of more than 120 students. Also held office hours and graded students' coursework.

Awards & Leadership Activities

- Received NYU Tandon CSE Academic Achievement Award **[2018]**
- Received NYU Tandon Scholarship worth $27K per annum **[2014-2018]**
- Student Union President **[2011 & 2013]**