Adit V. Deshpande

Machine Learning Enthusiast · Technical Blogger · Kaggle Competitor

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Education

UCLA (University of California, Los Angeles)   *Los Angeles, CA*

B.S. in Computer Science, Major GPA= 3.36   *Sept. 2015 - PRESENT*

- Notable UCLA Coursework: Data Structures, Calculus of Several Variables, Computer Organization, Logic Design of Digital Systems
- Independent Coursework (Coursera): Machine Learning, Introduction to Genomic Technology
- **Fluency:** C++, Java **Proficiency:** Python, Matlab **Familiarity:** Lua, JavaScript, and HTML Languages

Experience

UCLA Department of Neurology and Computer Science   *Los Angeles, CA*

Undergraduate Researcher   *May 2016 - Present*

- Working under Professor Fabien Scalzo to implement computer vision algorithms that assist in the detection of the arterial input function (AIF) in order to better quantify cerebral blood flow and provide more informed diagnoses for ischemic stroke patients.
- Using Matlab as computing and programming framework.
- In the process of writing a research paper for submission to ISVC 2017.

U.S Naval Research Laboratory   *Washington D.C*

Computer Engineer Intern   *June 2016 - Sept. 2016*

- Developed object localization algorithms through convolutional neural networks for deployment on IBM's TrueNorth neuromorphic chip and for use on an underwater robotics program.
- Wrote Matlab functions and shell scripts to format and preprocess datasets.
- Implemented a selective search and sliding window based approach to localization.
- Trained a CNN to place bounding boxes over a specific object of interest with a classification accuracy of 92.86 percent.
- Presented results to a group of engineers and upper level management at the conclusion of the internship.

UCLA Health   *Los Angeles, CA*

Full Stack Developer   *Feb. 2016 - May 2016*

- Created a remote monitoring and survey app for surgical patients, using the React Native JavaScript framework.
- Developed an interface for physicians and nurses that allows them to access the information from a shared database.
- Implemented camera features such as a timer and improved user interface.

Boston University RISE Summer Program   *Boston, MA*

Research Intern   *June 2014 - Aug. 2014*

- Performed Electrical Engineering research on a 16-core Epiphany Processor under Professor Ajay Joshi at Boston University.
- Set up and tested a Parallella-16 Desktop Computer using a variety of different benchmarks, while analyzing how the number of cores being utilized affected execution times and performance of a set of programs.

Projects

Technical Blog

HTTPS://ADESHPANDE3.GITHUB.IO/   *July 2016 - Present*

- Wrote several blog posts on deep learning and convolutional neural networks, as well as summaries of major research papers.
- Received over 92,000 page views and was featured as a guest post on KDnuggets.

MLB Win Predictor Neural Network Program

Written in Lua   *April 2016 - May 2016*

- Implemented a linear regression program that outputs the predicted number of wins for a baseball team given information about relevant statistics for the specific year.
- Classified teams' records within an average of 3 games (1.85 percent).

Accelerometer Data Analysis Neural Network Program

Written in Lua   *Dec. 2015 - April 2016*

- Built a neural network program that can classify accelerometer data into different activity labels by using a dataset from the UCI Machine Learning Repository and the Torch7 computing framework.

Sensor Data Collection App

Written in Java   *Nov. 2015*

- Built an app that collects, organizes, and displays information about all of the phone's available sensors (accelerometer, gyroscope, etc) and its current values.