AKSHAY ATUL DESHMUKH

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EDUCATION

University of Southern California (USC), Los Angeles, CA — May 2018
Viterbi School of Engineering — GPA: 3.71
Master of Science, Computer Science (General)

National Institute of Technology Karnataka (NITK), Mangalore, India — May 2016
Bachelor of Technology, Computer Engineering — GPA 9.11 (Approx. 3.75)

TECHNICAL SKILLS

Programming Languages and Databases	Python, Java, C/C++, MySQL, MongoDB Exposed To: C#, Matlab
Web Development	HTML, CSS, JavaScript, PHP, Node.js, Express.js Exposed To: AngularJS
Libraries & Tools	Git, ArgoUML, Hadoop, TensorFlow, NumPy, Pandas, Scikit-learn, NLTK Exposed To: Google Cloud, AWS, Caffe
Operating Systems	Linux, MacOS, Windows

WORK EXPERIENCE

Student Worker — Aug 2017 - Present
USC Integrated Media Systems Center, Los Angeles, CA
Informatics research center with focus on data-driven solutions for real-world applications

- Renovated Android application to support framework for viewing media files through augmented reality
- Developed PHP scripts for JSON data exchange between server and Android application, and optimized storage by 50%
- Created Android application to scan areas in Los Angeles for pollution through augmented reality
- Implemented IMG2GPS algorithm for image geo-localization using SVM classifiers to achieve 88% coverage of test data

Software Engineer - Intern — May 2015 - Jul 2015
Myntra Designs Pvt. Ltd., Bangalore, India
Indian e-commerce company for fashion and casual lifestyle products with annual revenue run-rate of $1.6 billion

- Created horizontally-scalable daemon in Java and MySQL to automate complaint registration in Oracle's Rightnow CRM
- Designed and developed REST endpoint, logic layer and Data Access Object (DAO) layer to accommodate daemon
- Equipped daemon with functions to parse media files for storage in Amazon S3
- Lowered duration of complaint registration from 10 seconds to 3 seconds

PROJECTS

Authorship Detection — Oct 2017

- Analyzed texts of Shakespeare and Emily Bronte for linguistic and lexical features with NLTK
- Achieved test accuracy of 94.67% with Naive Bayes classifier

Interior Design Application for Microsoft Hololens — Aug 2017

- Designed application for Microsoft Hololens to place common types of furniture in real world
- Implemented C# scripts in Unity to process spatial maps, and user gesture and commands

Credit Card Fraud Detection — Jun 2017

- Analyzed skewed data of credit card frauds through correlation and under-sampling with NumPy and Pandas
- Constructed triple-layered neural network with TensorFlow to achieve accuracy of 96% on blind dataset

Hand-Written Digit Recognition — May 2017

- Applied logistic regression, and K-Nearest Neighbor and SVM classifiers to MNIST dataset with NumPy
- Obtained best accuracy of 98.9% with quadruple-layered convolutional neural network built with TensorFlow

Advertisement Filtration and Logo Detection — Nov 2016 - Dec 2016

- Collaborated to design a Java application for filtering advertisements and detecting logos
- Conducted motion vector analysis and statistical analysis of audio samples to identify shots containing advertisements
- Employed HSV/HSL histograms to detect logos in video frames
- Successfully deleted advertisements and detected logos in test file

LEADERSHIP

Computer Science Senator, Viterbi Graduate Student Association, USC — Jan 2017 - May 2017

- Elected to represent students of Department of Computer Science
- Collaborated to organize social and career events for students including coding competitions and faculty-student dinners