Sujay S Kumar

No.45/3, SUNEHA, Padmanabhanagar, Bangalore-560061

sujay.skumar141295@gmail.com https://github.com/SujaySKumar/

Objective

To obtain a Graduate School Admission in the field of Computer Science and Engineering, followed by a career in Research & Development

• Research Interests: Computer Vision, Machine Learning, Social Network Analysis.

Education

• PES Institute of Technology, Bangalore, India(080 2672 1983)

August 2013 - Present

- B.E in Computer Science and Engineering
- CGPA: 9.52 out of 10

Course Projects

- Dermatological Disease Detection Using Image Processing and Data Mining Sep 2015 Nov 2015 Advisor: Prof. Channa Bankapur, Prof., CS Dept., PESIT
 - Uses Computer Vision and Data Mining techniques to predict the type of dermatological condition that the person is suffering from. The User Interface is in the form of an Android Application which allows the user to capture the picture of the skin condition and we predict the skin disease. Achieved upto 80% accuracy in detection.

• IPL Predict! April 2015 - May 2015

Advisor: Prof. Srinivasa Murthy, Assoc. Prof., CS Dept., PESIT

• It is an Android application, published on the Google Play Store, that implements a custom Prediction Algorithm in order to predict the winner of any IPL match. The application uses the data from all the previous IPL matches, the players' statistics, team performances, stadium history and numerous other stats in order to predict the winner of any IPL match with an accuracy of up to 85%.

• Web Development in Django

Advisor: Mr. Sandeep Raju, Product Engineer, Plivo Inc. Organization: Plivo Inc. (YC S12)

May 2015 - July 2015

- The following tasks were executed as part of the Developer Team at Plivo Inc., Bangalore.
 - a) Building REST APIs for the company database models from the ground up using Django and Django REST Framework.
 - b) Implementation of basic authentication and permissions for API calls
 - c) Building the official Operations and Control Dashboard for the Support Team at Plivo Inc.
- Social Network Analysis using NodeXL

Advisor: Prof. Nitin V Pujari, HOD, CS Dept., PESIT Organization: Ordell Ugo

Sept 2014 - Nov 2014

- The following tasks were executed as part of the project at Ordell Ugo.
 - a) Importing of meta data required for analysis from various social networking sites like Facebook and Twitter
 - b) Analysis of the meta data including the inter personal relationships between the person logged in and others on the social networking sites
 - c) Generation and Analysis of the Social Network Graph using NodeXL
 - d) Calculation and analysis of various Graph Metrics on the Graph Model Object including various metrics like In-Degree, Out-Degree, Betweenness Centrality, Closeness Centrality, Eigenvector Centrality, Page Rank and Clustering Coefficient.

• IlluminaText Oct 2014 - Nov 2014

Advisor: Prof. Srinivasa Murthy, Assoc. Prof., CS Dept., PESIT

■ Developed a fully functioning text editor cum Java IDE along with features like auto indentation of code, finding and replacement of tokens, syntax highlighting, highlighting of classes from the same package, compiling and running of Java code. The project was completed as part of Data Structures in Java course. All the features were implemented using data structures in Java including Stacks, Linked List, n-ary Trees and Binary Search Trees.

• Smart Meter May 2014 - June 2014

Advisor: Prof. Nitin V Pujari, HOD, CS Dept., PESIT

• Developed a RaspBerry Pi add-on to the existing Energy Meter which encompasses all the basic functions of a standard smart meter at a fraction of the cost. Electric utilization can be tracked through the cloud in real time which enables efficient management of power consumption at an affordable price.

Internships

• Summer Research Intern May 2014 - July 2014

Place: Ordell Ugo, PES Institute Of Technology

• Developer Intern May 2015 - July 2015

Place: Plivo Inc. (YC S12), Bangalore

Other Projects

• Built a two-click solution for deploying a **custom stack on the AWS instance** and on the local development machine. Synchronizes your local dev environment with that on the server in real time. Built using Docker Compose and Docker Machine as part of Team Lambda, it was one of the judge's favourite at Sequoia Hack 2015.

- Open Source contributor to Django Project, one of the largest open source web framework used extensively by the industry, including NASA, OpenStack, Mozilla and National Geographic.
- Open Source contributor to Mozilla Foundation on projects such as Bedrock.
- Built and maintained www.aatmatrisha.in, the official website of Aatmatrisha, one of the biggest techno-cultural fests organized by PESIT, in Karnataka.
- Built an Android app, **MoneyTracker**, which acts as your Digital Personal Assistant by keeping track of your expenses and other such important appointments. This is done by screening the SMS Inbox for critical information in real time and generating a graphical analysis of your expenditure.
- Built an Android app, **ePrescription**, that moves the whole process of medical consultation and prescriptions right into your phone. The prescriptions are stored digitally in the phone. Implements Google Search for the prescriptions, scheduling online appointments and video call.
- Built a web application, **NullSpace**, which tries to implement Hierarchical Learning structure to online tutor based distance learning framework. It allows students upto a depth of 2 and each level of students gets promoted to the higher level as soon as student of that level completes the course.

Key Courses

- Advanced Data Structures
- Compiler Design
- Programming in C

- Analysis and Design of Algorithms
- Micro-processors
- Advanced Python Programming
- Database Management
- Digital Design
- Programming in PHP

Skills

- Languages: Java, C, C#, Python, PHP, JavaScript, HTML5, CSS
- Technologies: Django, Django REST Framework, Android, BackboneJS, Flask
- Operating System: Linux, Unix

Co-Curricular Activities and Positions of Responsibilities

- Volunteer at Ignite Young Minds (IYM), an NGO working on providing education to orphans in Bangalore.
- Member Technical Staff at Ordell Ugo
- Head of Web Development and member of the Core Organizing Committee of Aatmatrisha 2015, one of the biggest techno-cultural fests in Karnataka.
- Represented PESIT in the International Debating Competition organized by Gujarat National Law University at Gandhinagar, Gujarat and MSR Parliamentary Debate conducted by MS Ramaiah Institutions at Bangalore.
- Worked as the Class Representative of my batch during the academic year 2013-2014.
- Social volunteer at CSI Christ Church, Chikballapur.