Nikhil Sulegaon

2995 Glenwood Dr APT 113 Boulder CO USA 80301

https://github.com/nikhilsu

nisu8311@colorado.edu

https://www.linkedin.com/in/nikhil-sulegaon/

+1-720-491-9222

EDUCATION

- **University of Colorado Boulder** — Boulder, CO
  Master of Science in *Computer Science*; **GPA: 3.8/4.0**   *Aug 2017 – Present (Expected: May 2019)*
  Relevant courses: Machine Learning, NLP, Probabilistic models for Machine learning, and Computer Vision.

- **BMS College of Engineering** — Bangalore, India
  Bachelor of Engineering in *Information Science and Engineering*; **GPA: 8.92/10.0**   *Sep 2011 – May 2015*
  Relevant courses: Data Structures using C, Design and Analysis of Algorithms, Operating Systems and Databases

PROGRAMMING SKILLS

- **Languages**: Python, C#, Java, Ruby, C++, C, PHP, and NodeJs.
- **Frameworks**: Tensorflow, Keras, Theano, ASP.NET, Flask, Ruby on Rails, SpringMVC, ReactJs with Redux.
- **Databases**: MS SQL Server, Postgres, MySQL, and MongoDB.
- **Others**: Android, Git, AWS, Heroku, CI, Docker, HTML/CSS, JavaScript, Shell scripting, and Powershell.

EXPERIENCE

- **Teaching Assistant** (S/W Dev Methods & Tools) - **University of Colorado Boulder**   Sep 2017 - Present
  - Teaching 60 students, full stack development and deployment of applications using core Agile principles and TDD.
  - Training students on technologies like Shell Scripting, HTML/CSS, JS, Git, REST, MySQL, PHP, CI, and Heroku.

- **Application Developer** - **ThoughtWorks**, Bangalore, India   Aug 2015 - Aug 2017
  - **Project Management Tool (C#, Silverlight, ASP.NET)**: A Multi-tenant SaaS application having about 2000 tenants and 2000-5000 users per tenant in production.
    * Worked on building a robust backend through Test Driven Development using C#.
    * Refactored the legacy code base and increased the test coverage from 16% to 65%.
    * Optimized complex SQL queries to improve the performance of key features by around 80%.
  - **Food-Supplies Management (Python, Sklearn, Keras)**: A stock management tool to help the pantry of the office plan the supply of fruits, vegetables, and grocery in order to minimize wastage of food.
  - **Danglay (Ruby, Ruby on Rails)**: A scalable carpooling web application using Ruby on Rails to solve the problem of commute faced by numerous employees at ThoughtWorks.

- **Freelancer** (Embedded System Prototyping) - **Self Employed**, Bangalore, India   Oct 2014 - June 2015
  - **EMG Controlled Wheelchair (Arduino, C)**: A wheelchair which was controlled by an electromyograph, aimed at helping paraplegic patients move around. This system could also be controlled by a voice recognition unit.
  - **Surveillance System (Java, Android, Python, C)**: Security system that enabled the owner to control the entrance gates and lockdown the house. This system also provided live surveillance of the house on a smart-phone.

PROJECTS

- **Object 3D Pose Estimation (Python, Tensorflow, C#, Unity)**: Using Convolutional Neural Nets to predict a dynamic object's 3D location(x, y, z) and rotation(roll, pitch, yaw). This information is piped to an AR head-mounted display to generate real and virtual object interactions. **Links:** *Demo*, *Paper*, *GitHub*.

- **Navisys (Java, Android, Python, C++, OpenCV)**: Designed an embedded system, fitted into a wearable jacket, that provided turn-by-turn navigation with dynamic obstacle detection to visually impaired users. Ultrasonic sensors were later replaced by a Convolution Neural Net to increase performance by 20%. **Links:** *Report*, *Synopsis*.

- **Teacher's cube (Python, Bash)**: Electronic mnemonic cubes, representing alphabets of a language, that pronounced the word formed when arranged one beside the other. Aimed to help dyslexic children formulate and pronounce words.

ACHIEVEMENTS

- 'Best Research Undergrad Project' award at an IEEE Conference 2015. The project also featured in the *newspaper(link)*.