Sachin

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EDUCATION

NETAJI SUBHAS INSTITUTE OF TECHNOLOGY
University of Delhi
B.E. in Information Technology
Expected Graduation : May 2019
Percentage : 70.2 (Cum. GPA: 7.77)

RAJKIYA PRATIBHA VIKAS VIDYALAYA
New Delhi, India
AISSCE : 88.80% (2015)
AISSE : 9.0 CGPA (2013)

LINKS

Github:// **sachinsngh165**
LinkedIn:// **sachinsngh165**

SKILLS

PROGRAMMING
• C • C++ • Python • MYSQL
Markup Languages:
• HTML5 • CSS
Familiar:
• PHP • Javascript • Wordpress
• AWS • Google Cloud • LaTeX

FRAMEWORKS
• Keras • Django • Bootstrap

SCIENTIFIC LIBRARIES
• OpenCV • Numpy • Matplotlib
• Scikit-Learn • Pandas • PyQtGraph

TOOLS
• Sublime • Git • Jupyter Notebook
• WebRTC • Websockets • Postman
• Cumulocity IoT Plateform

OS
• Mac OSX • Linux • Windows

LANGUAGES
• English • Punjabi • Hindi

RELEVANT COURSES
• Data Structures • Algorithms • RDBMS
• Operating Systems • Object Oriented
Technology • Information Theory and
Coding • Computer Networks • Theory of
Automata • Computer Graphics •
Software Engineering • Software Testing

EXPERIENCE

GOOGLE SUMMER OF CODE (GSOC) | Software Developer
May 2018 - Aug 2018
• Enhancements to P2PSP simulator for the real-time streaming of multimedia content over the Internet.
• Redesigned the **Inter Process Communication** mechanism by replacing UNIX sockets with Internet sockets.
• 150% more Optimized plotting method using PyQtGraph.
• **Tech:** Python, IPC mechanism, Sockets, PyQtGraph

ENRICHAI | Software Engineer Intern
Dec 2017
• Designed and implemented simulation for transformer monitoring system.
• Designed rating algorithm to rate the transformers and added functionality to Fleet Management System.
• **Tech:** IoT, AWS, Python, Cumulocity Platform

SINCGRID | Software Engineer Intern
Dec 2018 - Jan 2019
• Designed and implemented IoT Smart Switch
• Built an Analyser, which draw insights from user's data
• Deployed the same on AWS server
• **Tech:** IoT, AWS, Python, NodeJS, MongoDB

PROJECTS

TALK
• Developed a real-time peer to peer video chat application using WebRTC.
• Signalling were used to exchange IP addresses, codecs, file formats and other useful meta-data to initiate and maintain a call.
• Websockets were used to made signalling.
• **Tech:** WebRTC, Websockets, Javascript, Python

NEURAL IMAGE CAPTIONING
• Worked on image captioning based on neural network.
• The model first extracts the features by convolution neural network and then generates caption by "Recurrent neural network.
• Normal Sampling and Beam Search were used to predict the captions.
• **Tech:** Python, Keras, Convolution Neural Network, Recurrent Neural Network

ANIMAL CLASSIFICATION USING TRANSFER LEARNING
• Worked on classification of animals using Convolutional neural network.
• Pre-trained VGG-16 model was used.
• Accuracy of about **97%** was achieved in just 6 epochs with a dataset of 10000 images.
• **Tech:** Python, Keras, Convolution Neural Network, OpenCV

AUTOMATED LICENCE PLATE RECOGNITION
• Developed a system that can automatically extract licence plate from car and recognize it's plate number.
• Used OpenCV to extract licence plate and machine learning algorithm, optical character recognition (OCR) to recognize plate number.
• **Tech:** Python, OpenCV, Machine Learning, OCR