

Suraj

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EDUCATION

IIIT GUWAHATI

B.TECH IN ECE. CPI: 7.32
Grad. May 2018 | India

LOYOLA HIGH SCHOOL

Grad. May 2013 | India

LINKS

Facebook:// [suraj5200](#)
Github:// [Suraj520](#)
LinkedIn:// [suraj-690209218](#)
YouTube:// [Suraj](#)
Twitter:// [@suraj520_](#)
Quora:// [Suraj-230](#)

COURSEWORK

UNDERGRADUATE

Computer Programming(C)
Data Structures
Operating Systems
Shell Scripting
Pattern Recognition & ML
Linguistics
Design of Internet of Things
Consumer behaviour & Economics
(Alongwith Academic Electronics Coursework)

SKILLS

PROGRAMMING

Over 10000 lines:

• Python • Shell • HTML • \LaTeX

Over 1000 lines:

• C • C++ • Java/Kotlin • C#

Familiar:

• Computer vision • Machine Learning
• Natural language processing
• Deep learning • Image Processing
• Django • Flask • FastAPI

SOFT SKILLS

Project Management • Leadership

CERTIFICATIONS

COURSERA

• Machine Learning with Python
• Neural Networks & Deep Learning
• Improving Deep Neural Networks
• Algorithm Toolbox
• TensorFlow Developer Specialization
• Structuring ML Projects.

EXTRA(S)

• Employee Appreciation Certificate
• Robotics Competition Certificates

EXPERIENCE

DIMENSION NXG - DEEP LEARNING ENGINEER

Jul 2021-Present | India

- Dockerized Dense SLAM resources like ElasticFusion and CoFusion along with modifying their source code for inferencing on pre-recorded samples and Intel realsense D435i.
- Worked towards multiway-registration, Dense RGB-D SLAM and incremental SFM pipelines from Open3D & OpenMVG.
- Incorporated state machines within mediapipe hand pose estimation to convert discrete gestures to stable gesture states. Accuracy was enhanced by using majority filter and array blocking queues on detected gesture fragments.
- Worked towards the training and ideation pipeline of single and dual stage objectron pipeline in Android.

DEEP LEARNING ANALYTICS - SWE, ML ENGINEER

May 2021-June 2021 | Canada

- Worked towards NER based Factoid Extraction, Abstractive and Extractive summarization of webinar videos using Spacy, BERT, BART, Roberta, Longformer-4096 and Big-Bird.
- Worked towards ball-change point detection in bird eye view of soccer matches using bayesian change point detection and pytorch-forecasting.

DIMENSION NXG - A.I TEAM LEAD | CV & DL ENGINEER

June 2018 - Dec 2020 | Mumbai, India

- Led team of 3-5 developers independently, managed important milestones in the project.
- Converted trained/fine-tuned model to Intermediate representation along with integration to cross platform apps(Snapdragon DLC, Tflite etc) through optimization and quantization techniques over various levels.

DEVATHON | SOFTWARE ENGINEERING INTERN

Oct 2017 - Dec 2017 | Hyderabad, India

- Developed a conversational e-marketing chatbot through DialogFlow.

PREDIBLE HEALTH | DEEP LEARNING INTERN

May 2017-Jul.2017 | Bangalore, India

- Contributed to the existing pipeline of ML/DL based hepatic lesion detection from CT Scan Images.

PUBLICATIONS

Visual machine intelligence for home automation Suraj; Ish Kool; Dharmendra Kumar and Shovan Barma at IEEE IOT-SIU 2018.

Keystroke Rhythm Analysis Based on Dynamics of Fingertips Suraj, Parthana Sarma, Amit Kumar Yadav and Shovan Barma at Springer MISIP 2017.

OTORNoC: Optical tree of rings network on chip for 1000 core systems Soumyajit Poddar, Suraj, Amit Kumar Yadav and Hafizur Rahaman at IEEE ISIED 2017.

PROJECTS

Cognitive Annotation Tool- An automatic annotation tool for labelling images in bulk with their corresponding bounding box annotations.

JetBrains Academy Python Developer track- Various mini projects of easy, medium and hard difficulty.

Train-Infer-MLOps- Machine learning and deep learning model implementations with various real-world use-cases.