Parth **Goyal**

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Education

Indian Institute of Technology Ropar *Ropar, India*

B.Tech. in Computer Science and Engineering *August 2017 - Present*

Current C.G.P.A : **8.39/10**

Central Board of Secondary Education *Hisar, India*

AISSCE (Class 12 PCM): **95.0%** AISSE (Class 10) C.G.P.A : **10**

Skills

Programming Languages C/C++, Python, Javascript, Java

Frameworks / Libraries TensorFlow, Keras

Softwares / Tools / OS Git, Linux(Ubuntu)

Projects

Indian Coins Detection and Instance Segmentation *TensorFlow, Keras, Python*

- Detects masks and predicts class for each instance of coin in the image and draws bounding boxes along with it
- Used the **ResNet-FPN-101** architecture for instance segmenting coin images into all different types of coins
- Used python packages like **Matplotlib, Numpy, SciPy**
- Converted masks to bounding boxes and manual annotation of images along with masks
- Made the whole dataset with all the varities of coins and **Masked** all images using VGG Annotator

Amacon - an Ecommerce Startup *Java, JUnit Test Suite*

- Build an Ecommerce startup similar to Amazon mainly involving three entities: Database, Administrator and Customer
- Assiging ID to each new customer and making a database of their cart items
- Using Exception Handling Techniques and JUnit Test Suite make sure that system does not crash

RISC-V Assembly Code Simulation *Javascript, Lexer, Python*

- Converted Assembly code (RISC-V) to Machine code using Lexical Analysis
- Handled .data variables and .text variables and stored them in Memory after conversion
- Build classes such as CPU, System, Register, Registry Access, Main Memory and Control for simulation of the Machine Code

Spam Message Filter *C*

- Developed a program which classifies text/email messages as spam and not spam
- Used **Levenshtein distance** for measuring distance between strings
- Implemented **K-Means Clustering Algorithm**

Flutter Projects *Flutter, Dart*

- Infinite Startup Name Generator using **englishwords** package in flutter
- Easy List App for keeping records of favorite items and managing them
- A Unit Conversion App for translation of different units

Relevant Courses

Computer Science Deep Learning Specialization, Data Structures, Digital Logic Design, Programming Language Pragmatics and Paradigms, Computer Architecture

Mathematics Calculus, Linear Algebra, Discrete Mathematics, Differential Equations, Probability

Biology Biology for Engineers

Electrical Signals and Systems, Basic Electronics

Positions of Responsibility

Branch Representative *June 2018 - Present*

Represented my CS batch 2017 and acted as a bridge between students and academic staff.

House Captain *2014 - 2015*

Appointed the House Captain of the Rabindranath Tagore House in Class 10 representing over 100 students.

Miscellaneous

JEE Rank Secured a rank of **1027** (Out of **1.5 million candidates**) in Joint Entrance Exam, 2017.

Institute Merit Scholarship **100%** merit scholorship offered by the Institute for getting a rank under 1500.

Branch Representative Represented my CS batch 2017 and acted as a bridge between students and academic staff.

BAJA Volunteer Volunteered in the BAJA-SAE India event held in IIT Ropar in March 2018 and appointed as 1st Year Head.