

Anvit Mangal

New York University
Courant Institute of Mathematical Sciences

am10719@nyu.edu
<https://anvitmangal.github.io>
+91-9971729258

Education

Indraprastha Institute of Information Technology, Delhi

B.Tech. Computer Science & Applied Mathematics (CSAM)

Advisors: Chetan Arora, Subhashis Banerjee

CGPA - 8.36 (Absolute Grading) : **Top 10 percentile in CSAM**

New Delhi, India

2016 - 2020

Research Experience

Signal Processing and Biomedical Imaging Lab

Research Scientist

Advisor: Anubha Gupta

Building Stain Normalisation Algorithms using generative DL methods, modelling biological networks using Recurrent Neural Networks, a paper under review in the MedIA Journal, Elsevier

New Delhi, India

January 2020 - Present

Indian Institute of Technology, Delhi

Research Assistant

Advisors: Chetan Arora, Subhashis Banerjee

Applied state of the art object detection techniques and proposed a novel Deep Learning model for Breast Cancer Detection in Mammograms, achieving an increased classification accuracy of 3% AUC on a procured Indian dataset.

New Delhi, India

August 2018 - January 2020

Indraprastha Institute of Information Technology, Delhi

Undergraduate Research Assistant

Advisors: Jainendra Shukla, Swapna Purandare

Researching fine-grain classification of pollen grain species. Built a dataset of 1400 classes of pollen grains and trained a ConvNet for the fine-grain classification

New Delhi, India

August 2019 - January 2020

Indraprastha Institute of Information Technology, Delhi

Undergraduate Research Assistant

Advisors: Saket Anand, Swapna Purandare

Used novel dense counting techniques to build a tool for Honeybee counting in dense hives. Built a tool for classification for honeybee health and species classification resulting in significant improvements in the current state of the art scores.

New Delhi, India

January 2019 - May 2019

Industry Experience

Digital Product School, UnternehmerTUM

AI Engineer

Advisors: Afsaneh Asaei

Munich, Germany

May 2019 - August 2019

Built an automated tool to match and connect AI Freelancers and Jobs using Natural Language Processing, resulting in faster freelancer and job search.

Indian Statistical Institute Delhi

Data Science Intern

New Delhi, India

August 2018 - April 2019

Advisors: Mudit Kapoor

Applied Statistical techniques to Census Data by NITI Aayog, Government of India, and made engaging visualisations using R and JS-D3, to make the complex data more readable.

BluePi Consulting

Data Science Intern

Gurugram, India

May 2018 - August 2018

Built an article recommender system using Natural Language processing and generated cohorts using extracted features, leading to significant increase in user engagement and partnership with two news clients.

Teaching Experience

Fall 2019: (MTH573) **Scientific Computing**, IIIT Delhi

Spring 2019: (DES130) **Introduction to Engineering Design**, IIIT Delhi

Fall 2018: (CSE101) **Introduction to Programming**, IIIT Delhi

Achievements

Awarded Teaching Assistantships, in 3 consecutive semesters at IIIT Delhi

First Position in IIT Delhi Research Open House, for work on Breast Cancer Detection.

Completed the **Deep Learning Summer School** at **Indian Institute of Technology, Kanpur**

Leadership and Service

Student Representative, Disciplinary Action Committee, IIITD, 2019/2020

Member, Student Council, IIITD, 2019/2020

Member, Organising Committee, Annual Technical Fest and Cultural Fests, IIITD, 2018-2020

President, Photography Cell, IIITD, 2018/2019

Member, Sports Council and Basketball Team, IIITD, 2018/2019

Taught basic high school algebra to underprivileged students, DLF Foundation, May 2017

Programming Skills

Languages: Python, Java, MATLAB, Julia, L^AT_EX, Linux

Tools and Libraries: PyTorch, Tensorflow, Scikit-Learn, Pandas, Keras, Caffe