

ABHINAV NAGPAL

Software Developer & Technology Enthusiast

abhinavnagpal12@gmail.com

Gurgaon, India

INTERNSHIPS & TRAININGS

Binary Semantics Ltd., Gurugaon

Summer Intern

May 2018 – July 2018

- Worked with various web technologies such as ASP.NET and learnt to deploy ML models.
- Created a web application to Rate selfies
- Given a letter of appreciation by the mentor.

Coding Blocks, New Delhi

Training

June 2018 – July 2018

- 2 months ML and Deep learning summer training & certification.
- Learn to implement many ML and deep learning models from scratch (CNN, SVM, etc.)
- Worked on a project in speech technology to auto finish an unfinished music.
- Used hidden Markov Model & Principles of Music Theory.

National University of Singapore

Training

Dec 2018 – Jan 2019

- Completed a program under the Global Academic Internship Program (GAIP).
- Conducted in partnership with National University of Singapore (NUS) and Hewlett Packard Enterprise, Asia-Pacific.
- Worked on real-world data-sets using tools like Hadoop, Ambari, MapReduce

ACADEMIC PROJECTS

Facial expression recognition for unplanned images

Aug 2018 – Sep 2018

Vellore, India

- A shallow CNN using RMSProp optimizer
- Results compared with existing architectures such as AlexNet and VGG-16
- Used saliency maps to understand the classification
- Technologies Used: Python, Tensorflow, Numpy, Pandas, Matplotlib

Image Captioning in PyTorch

Feb 2018 – Mar 2018

Vellore, India

- A deep Encoder-Decoder model trained on the famous COCO dataset, implemented as part of Udacity's Computer Vision course

RESEARCH WORK

- ❖ **Python for data analytics, scientific and technical applications - Dr. Goldie Gabrani**
(Accepted at AICAI'19)
- ❖ **Genetic Algorithm Evolving & Strategizing the Game of Tetris – Dr. Goldie Gabrani** (Accepted at ICAISC'19, Poland)
- ❖ **FCBODM – Fuzzy constraint based outlier detection models – Dr. BK Triparthy** (Submitted to ITCC'19 Singapore)
- ❖ **Poster selected for showcase in AIDR'19, CMU**

SKILLS

MySQL, HTML	○○○ ○○
C++, C, Python	○○○ ○○
JavaScript, CSS	○○ ○○○
Numpy	○○○○ ○
Pandas	○○○ ○○
Matplotlib	○○○ ○○
Tensorflow	○○ ○○○
Keras	○○ ○○○

CERTIFICATIONS

Coursera

- Machine Learning – 12-week course taught by Dr. Andrew Ng
- Deep Learning Specialization: 5-course by Dr. Andrew Ng & deeplearning.ai team

Udacity

Introduction to Computer Vision by Dr. Aaron Bobick, Georgia Tech

Stanford University (CS231n)

Convolutional Neural Networks for visual recognition: Course taught at Stanford University about CNN's by Dr. Li.

Tetris Bot (AI project, 4th Semester)

3rd Semester Vellore, India

- Score for the best possible move based on heuristics
- Used genetic algorithm which helped the bot exceed fitness Limit of 150000 lines
- Designed the complete UI and functionality of the bot
- Technologies Used: Html, CSS(Bootstrap), JavaScript (NodeJS, express), MySQL

Survey on Eating Disorders

1st Semester Vellore, India

- Researched on many eating disorders and their impact
- Conducted a survey in Vellore using Google forms and with local help
- Helped detect early symptoms of eating disorders in many students

EDUCATION

B-Tech in Computer Science and Engineering

VIT University 8.93/10

July 2016 – Present

Senior High School

Mount St. Mary's, New Delhi 92.4%

April 2014 – May 2015

High School Graduation

Mount St. Marys, New Delhi 9.4/10

April 2012 – May 2013

MEMBERSHIPS

COGNET

Member

August, 2018 – Current

- Member of COGNET, a deep learning research group;
- Involved in making blogs, re-implementing research papers and learning new technologies.

Make A Difference

Volunteer

June 2017 – July 2018

Volunteer, Make A Difference (MAD); NGO for multiply challenged.