# Aditya Natarajan

adinat96@gmail.com | +91 9481810025

## EDUCATION

**COLLEGE OF ENGINEERING, GUINDY** | B.E, Computer Science and Engineering
2018 (expected) | Chennai, TN
8.89/10

**NATIONAL PUBLIC SCHOOL, RAJAJINAGAR** | Higher Secondary, CBSE
2014 | Bangalore, KA
95.6 %

**NATIONAL PUBLIC SCHOOL, RAJAJINAGAR** | Senior Secondary, CBSE
2012 | Bangalore, KA
10/10

## EXPERIENCE

**INDIAN INSTITUTE OF SCIENCE** | Summer research intern
May 2016 – June 2016 | Bangalore, KA

- Worked on the paper 'Depth Map Prediction from a Single Image using a Multi-Scale Deep Network'
- Applied Machine Learning and Deep Learning concepts to implement solutions for Computer Vision problems
- Performed literature study on Neural Turing Machines and Machine Learning concepts

**ECO WATCH INDIA** | Volunteer
May 2016 – June 2016 | Bangalore, KA

- Designed and implemented educational aids on environmental conservation
- Participated in an on-site soil conservation project
- Hosted multiple events as part of an outreach program for underprivileged school children

## PROJECTS

**GESTURE CONTROLLED RC BOT**
Skills : OpenCV, Microsoft Azure, Raspberry Pi

- Designed a fully functional gesture controlled RC bot on Raspberry Pi
- Wrote OpenCV modules to help identify and control the bot using a variety of hand gestures
- Also utilized Microsoft Cognitive services Computer Vision API for OCR processing
- This project won 2nd place in Microsoft's Code.Fun.Do Hackathon and was chosen for the national finals to be held at Microsoft IDC, Hyderabad

**SEMANTIC SIMILARITY APPROACH TO SPAM FILTERING**
Skills : Neural Networks, Support Vector Machines, Python

- Designed and implemented a "Corpus-Based Thesaurus" using vector similarity and PCA techniques to classify email as spam using neural networks and Support Vector Machines
- Also experimented with and implemented other approaches including Adaptive Backpropogation Neural Networks (ABPNN)
- Achieved an accuracy of 84%

**STOCK MARKET PREDICTION USING MACHINE LEARNING**
Skills : Python

- Implemented a variety of Regression techniques (Random Forest, Bagging, Gradient Boosting, AdaBoost) to predict and plot the stock price of 5 BSENYSE listed companies
- Also employed linear classification techniques to predict stock price direction
- Twitter sentiment analysis was also performed to verify the results and propose improvements

## SKILLS

**Languages**:
Python • C++ • C • Java • HTML/CSS •PHP
**Tools**:
LaTeX• MATLAB/Octave •Git
**Databases**:
MySQL • Oracle
**Operating Systems**:
Linux • Windows

## COURSEWORK

Digital Principles of System Design
Computer Architecture
Data Structures
Database Management Systems
Probability and Queuing Theory
Design and Analysis of Algorithms
Operating Systems
Software Engineering
Java and Internet Programming
Artificial Intelligence

## HONORS

**2ND PLACE, MICROSOFT CODE.FUN.DO HACKATHON** | Selected for national finals
**CBSE INSPIRE SCHOLARSHIP** | For finishing in the top 1 % in class 12
**CERTIFICATE OF MERIT, CBSE** | For finishing in the top 0.1 % in class 10
**MULTIPLE QUIZ PRIZES** | School and college level

## EXTRA CURRICULARS

**THE GUINDY TIMES (CAMPUS MAGAZINE)** | Executive Editor
**QUIZZERS ANONYMOUS (QUIZ CLUB)** | Director
**K! (ANNUAL TECHNOMANAGEMENT FEST)** | Organizer (2017), Coordinator (2016)
**NATIONAL SPORTS ORGANIZATION** | Active member (2015)

## LINKS

PERSONAL WEBSITE : adinat.github.io
GITHUB : github.com/adinat
SKYPE : adinat96

## LANGUAGES

English • Tamil • Kannada • Hindi

## INTERESTS

Artificial Intelligence • Innovation • Football • Reading • Movies