# Manohar Koya

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# **EDUCATION**

### **BML MUNJAL UNIVERSITY**

**B.Tech in Computer Science** 

Aug 2017 - 2021 | Gurgano, India School of Engineering and Technology Bachelor of Technology Cum. GPA: 8.21 / 10.0 Major GPA: 8.85 / 10.0

### SRI CHAITANYA JR. COLLEGE

+12. May 2017 | Hyderabad, India

### LINKS

Github:// Manohar Koya LinkedIn:// Manohar Koya Codechef:// manohar9669 Codeforces:// ManoharKoya

# COURSEWORK

### **UNDERGRADUATE**

Object Oriented Programming + Java Database Management Systems Data Structures and Algorithms Design and Analysis of Algorithms

(Club Teaching Asst. for Juniors)

Operating Systems

Theory of Computation

Computer Networks

Computer Organisation and Architecture Information Retrieval

Cryptography

Artificial Intelligence

Machine Learning

Software Engineering

Compiler Design

# **SKILLS**

### **PROGRAMMING**

Experienced:

 $C++ \bullet C \bullet Python \bullet Android \bullet Java$ 

over 1000 lines:

CSS • HTML • Batch

Familiar:

Shell • Flutter • JavaScript

# HOBBIES

- Competitive Programming
- Ping Pong (Beginner)

### **EXPERIENCE**

### CYBERAEGIS | ANDROID DEVELOPER INTERN

May 2019 - July 2019 | Hyderabad, India

- Developed Front-end for Android application of Cyberaegis institute.
- Led a team of 5 fellow android developers in project involved.
- Front-End developer Wrote and reviewed code in Java, Styled the complete application interface.

## **PROJECTS**

### **AUTO-PATH** | SNAKE GAME AUTOMATION

Apr 2020 - May 2020 | Machine Learning

- Learnt and Used Genetic Algorithm for Implementation.
- Feed forward Artificial Neural Network is used as snake brain.
- Applied different combinations of Crossover-Mutation Methods for Statistical analysis of Genetic Algorithm.
- Observed a 25.6% score advantage with respect to time and 43.4% time advantage with respect to constant score while using Weight-Neuron as Crossover-Mutation pair.

#### **ANTON | TWEET TRENT ANALYZER**

Dec 2019 | Information Retrieval

- Twitter Bot for Trend analysis, Topic suggestion, Hashtag Trend locator.
- Implemented on call/tag identification, trend analysis based on rate of increase in likes and retweets wrt time using Twitter python api.
- 78% accurate subject identification with hashtag matching.

### **DRONE-PATH** | Drone Scheduling Algorithm

Feb 2020 | Algorithm Development

- Developed Drone Scheduling Algorithms for an NP-Hard problem.
- Idea implementation of Greedy & Clustering based Algorithms based on Fuel locations along with ANN for algorithm selection.
- Initial 10<sup>6</sup> tests were performed on both algorithms while simultaneously training the ANN. Rest were done on ANN output.
- Observed an 89% accuracy on algorithm selection (ANN).

### **STEGANOGRAPHY** | RESEARCH REVIEW

May 2020 | Cryptography

- Studied Least significant bit & Jsteg Steganographies.
- Implemented LSB with last 2 bits of pixels & Jsteg with last 1 bit of Cosine coefficients for each 8X8 blocks of the image.
- Compared ease of visual attack over LSB images in both methods. Analyzed and reviewed histogram drawbacks and cover-up methods in naive Jsteg Steganography.

# **AWARDS**

2020 Nationals Smart India Hackathon (SIH-2020) National Finalist.

2020 2<sup>nd</sup>/40 Intra-Campus Hackathon, BMU

2017 75% Scholarship awarded for B.Tech in BMU