

# Jayaraman N R

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**CODECHEF:** <https://www.codechef.com/users/range123>

## OBJECTIVE

To become a well-rounded Computer Scientist through continuous learning. I believe that I have the desire to learn and will constantly improve myself to match the requirements.

## EDUCATION

### UNDERGRADUATE

**Sri Sivasubramaniya Nadar College Of Engineering (SSNCE),**

**B.E (COMPUTER SCIENCE AND ENGINEERING)**

**CGPA: 8.86/10 (till 6<sup>th</sup> SEMESTER)**

**YEAR OF GRADUATION: 2021**

### 12<sup>th</sup> STANDARD

**St. John's English School and Junior College (CBSE),**

**Result: 479/500 (95.8%)**

**GRADUATION: MAY 2017**

### 10<sup>th</sup> STANDARD

**St. John's English School and Junior College (CBSE),**

**Result: 9.6 CGPA**

**GRADUATION: MAY 2015**

## SCHOLASTIC ACHIEVEMENTS

2020 Top 30 submission, IIT Kanpur [Cybersecurity Hackathon](#).

2020 Second Place, Datathon (Data science Competition) held at CEG, Chennai.

2019 Was awarded a **Merit Scholarship** for academic excellence in Semesters 3 & 4.

2019 Winner, JAVA Coding competition conducted at MIT, Chennai.

2019 Winner, Reverse Coding competition held at CEG, Chennai.

2018 Overall winner, intra-College Microprocessor Workshop.

## SKILLS

### PROGRAMMING LANGUAGES

C, C++, Python, Java, JavaScript, SQL, GO, R.

### FRAMEWORKS:

Numpy, Pandas, Keras, Tensorflow, PyTorch, Git, OpenCV, Spacy, Flask.

### HARDWARE PLATFORMS

Raspberry PI, Arduino Uno, NodeMCU.

### INTERESTS

Competitive Programming, DeepLearning, NLP using Transformers, R-Learning (DQNs), Generative Networks.

## EXPERIENCE

- Interned at **Leankloud Solutions (2020 April-June)**, worked on generating sizing recommendations for Virtual Machines and Load Balancers on AWS.

The Memory and Cpu resources required for virtual machines are predicted (using SVM) based on the constraint on response time . Built a Flask endpoint for the same.

Also built a framework which fits multiple Machine Learning models on the given VM data and determines if it is possible to size the virtual machine based on the response time.

- Interned at **Exeter Premedia Services (2019 December)**, worked on a document parser which classifies Research papers, extracts a relevant summary and a set of key words from the document using pre trained Transformers (Sequence Models).

Extracted sentences from the Research Papers as features and Made use of a pre-trained transformer (*BERT*) to perform the summarization.

## COURSES AND CERTIFICATIONS:

1. [Introduction To Deep Learning](#) (2020), National Research University Higher School of Economics, Coursera
2. [Natural Language Processing with Classification and Vector Spaces](#) (2020), Deeplearning.ai, Coursera
3. [Algorithmic Toolbox](#) (2020), University of California San Diego, Coursera
4. [Data Structures](#) (2020), University of California San Diego, Coursera
5. [Algorithms on Graphs](#) (2020), University of California San Diego, Coursera
6. Build Basic Generative Adversarial Networks (GANs) (Present), Deeplearning.ai, Coursera

## PROJECTS

1. **Deep Generative Models for Faces (Present)**, A Project aimed at generating faces and evaluating different generative models such as Auto-Encoders, GANs, VAEs etc. the models are trained on the *Labeled Faces in the Wild Dataset*.
2. **Temperature-Monitor (Present)**, An IOT based project for continuously Monitoring the temperature of Mortar blocks using Arduino and thermocouples to analyse its physical properties, done as an Internally Funded Project.
3. [MalwareDetection](#) (2020), A MachineLearning based project for predicting if a program is malicious by using the string representation for the program. An ML based approach was also used for detecting **BotNets** in network traffic, Submitted for IIT Kanpur Cybersecurity Hackathon.

4. [RangeBot](#) (2020), A Bot that plays chess using *Alpha-Beta Pruning* and Endgame TableBases. It makes use of a creative heuristic function for searching the board states. Attained Peak performance of 1600 elo.
5. [See-In-The-Dark](#) (2019), A Web-App that uses a *Fully-Convolutional neural network* to Brighten Dark Images with little loss in information and essentially allow us to see in the dark, built for MLH local hack day.
6. [Flight Delay Prediction](#) using Machine Learning (2019), A project to predict whether a flight will be delayed using the relevant weather data and to test the accuracy of the different Classifiers and Regressors on the data.
7. [Dr. Plip](#) (2019), A prototype chat bot that simulates a psychiatrist and suggests solutions to common mental health problems, developed at Yet Another Hackathon held at SVCE.
8. [Face ID](#) (2018), A Mobile App for detecting and keeping track of faces by checking the cosine similarity of the Embedded vectors for faces. The embeddings are generated using a pre trained model.
9. [LocationPin](#) (2017), A Mobile App for Real-Time Location Sharing/Pinning over the internet.

## EXTRA-CURRICULAR ACTIVITIES

1. Take part in weekly **Competitive Coding competitions** across various Online Platforms. codechef, codeforces, hackerrank and leetcode.
2. Active Participant of the '**Developer Student Club**' of SSNCE.
3. Play Online chess regularly.
4. Participate in various contests at technical symposiums held at various institutions.
5. An avid Rubik's cube enthusiast who loves to take part in speedcubing contests.