Rochan Avlur Venkat

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Education

- **Mahindra Ecole Centrale** — Hyderabad, India
  Bachelor of Engineering in Computer Science; GPA: 3.66 (9.16/10.0) — *Aug. 2017 – Current*
- **AECS Maaruti Magnolia Pre University College** — Bangalore, India
  High School; GPA: 3.20 (8.0/10.0) — *Jun. 2015 – March. 2017*

Experience

- **Mahindra Ecole Centrale** — Hyderabad, India
  Freshman — *Aug. 2017 - Current*
  - **sptm - Individual**: Developed and published a python package on PYPI called sptm (Sentence Prediction using Topic Modeling), Experimented and tested various Topic Modeling algorithms (LDA, LSA, NMF & TFIDF) and other vector models such as lda2vec, doc2vec and word2vec, Worked under Anupam Mediratta as a summer intern
    - *Language: Python*
    - *Libraries: sklearn, gensim, MALLET, lda2vec, tensorflow, spacy, nltk, Numpy, matplotlib*
  - **CineLog - Team(2)**: Developing an Intelligent and Adaptive Framework to enable Multiplexes predict opening day sales of a movie & optimize schedule to maximize profits both real-time and in near-future; designed and developed LSTM Networks, Sentiment Analysis and core RNN
    - *Language: Python, golang*
    - *Libraries: Tensorflow, Pandas, Numpy, matplotlib, sklearn, lstmpredictor, imdbpie, googleapiclient, request, python-twitter*
  - **Harmonize - Team(3)**: Developed a Proof of Concept of a decentralized blockchain based Music Publishing & Sharing Platform; designed and developed core blockchain and back-end services
    - *Language: golang*
    - *Libraries: aws-sdk-go, websocket*
  - **oWatcher - Individual**: Developed a Discord bot to display detailed in-game performance statistics of a players in Overwatch by Blizzard Entertainment
    - *Language: NodeJS*
    - *Libraries: discord.io, winston, OWAPI*
- **AECS Maaruti Magnolia Pre University College** — Bangalore, India
  High School Student — *Jun. 2015 - March. 2017*
  - **Research in Video Compression Algorithms - Team(2)**: Worked alongside Prof. Chandrashekar Vaidhyanathan, Contributions included to algorithm design, implementation and testing; Involved a lossless compression scheme that can be extended to both Near-Lossless and Lossy compression
    - *Language: C, R, Python*
    - *Libraries: ffmpeg, Libtiff, bnlearn, gRain*
- **Delhi Public School - East** — Bangalore, India
  Middle School Student — *Jun. 2013 - March. 2015*
  - **A Sensor Based System to effectively track Geriatric Care and Dementia patients**: Was responsible in developing the full stack solution, including micro-controller programming, Android application development and back-end services
    - *Languages: Python, Java, Processing, MySQL*
    - *Libraries: NA*

Awards & Achievements

- **2018 - Pragyan Hackathon, Bangalore, India - *Special Mention***: Showcased an Adaptive Movie Scheduling Framework for Multiplexes using RNN's, LSTM, Sentiment Analysis and Machine Learning
- **2017 - Brave Hackathon, Hyderabad, India - *First Place***: Showcased a Decentralized Music Publishing and Sharing Platform built over 24 Hours
- **2017 - Intel International Science and Engineering Fair (ISEF), Los Angeles, United States - *Finalist***: Showcased a research project titled - A Lossless Video Compression Technique Using Baysian Networks and Entropy Coding
- **2017 - Intel Initiative for Research and Innovation in Science (IRIS), Pune, India - *Grand Award Winner, Finalist***: Showcased a research project titled - A Lossless Video Compression Technique Using Baysian Networks and Entropy Coding
- **2015 - Intel Initiative for Research and Innovation in Science (IRIS), Bangalore, India - *Finalist***: Showcased a research project on am Efficient Thermoeletric Refrigeration System
- **2014 - Open European Championship FIRST Lego League, Mannheim, Germany - *Most Innovative Solution***: Showcased a research project on the Utilization of T2 Bacteriophages to fight Food Contamination
- **2013 - FIRST Lego League (FLL), Regionals, Bangalore, India - *Best Robot Design***: Showcased a robot design that was highly efficient while still remaining simplistic
- **2012 - Intel Initiative for Research and Innovation in Science (IRIS), Chandigarh, India - *Finalist***: Showcased a robot design that was highly efficient while still remaining simplistic

Programming Skills

- **Languages**: Python, C, R, C++, Golang, Javascript
- **Libraries**: libtiff, ffmpeg, ImageMagik, gensim, MALLET, TensorFlow, sklearn, Numpy, Pandas, Matplotlib2
- **Technologies**: MagicLantern, Apache, DynamoDB
- **Platforms**: AWS, GCP, Linux(x86, x86_64), Raspberry Pi, ARM Cortex-A53, Arduino, Android