Skanda **Suresh**

ML Researcher · Programmer

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Summary

Currently pursuing the final year of my B.E. CSE degree. Areas of interest include Machine Learning, Deep Learning and Computer Vision. My Previous internships were focused around these areas and have provided me with a strong foundation to pursue a career in these fields. Constantly looking towards embracing new challenges. Proficient programmer in python, C/C++ and Java. My technology stack of choice includes python and Linux, however I am always ready to learn new tools to solve the problem at hand.

Experience

Ericsson Research
Chennai, India

RESEARCH AND DEVELOPMENT INTERN
May. 2018 - July. 2018

- Successfully developed a model for an optimal sensor placement strategy in IOT environments using machine learning and sparse optimization techniques. Simulated the model on the public NOAA and Milano Smart Cities datasets.
- Worked on a project focused on relocating Syrian refugees in Turkey using telecom data. Developed a model to cluster refugees according to well being and came up with an algorithm to mine mobility trends of refugees.
- Assisted in improving the efficiency of mobile paging systems, modelling it as a top-N recommendation problem incorporating concepts of neural attention and item similarity.

IIT Madras
Chennai, India

RESEARCH INTERN
Nov. 2017 - Dec. 2017

- Worked under professor Ganapathy Krishnamurthi of the Engineering Design department in the Medical Imaging and Reconstruction Lab on a project titled Content Based Medical Image Retrieval.
- Applied Computer Vision and Deep Learning techniques using Convolutional Neural Network (CNN) architectures.
- Set up an image processing pipeline to preprocess dataset accumulated from various sources.
- Used semantic segmentation to classify various organs, adopted a transfer learning approach for the given problem.

WABCO Technology Centre India.
Chennai, India

DEVELOPER INTERN
Jun. 2017 - July. 2017

- Worked on developing a prototype remote (web based) diagnostic platform for commercial vehicles.
- Involved selection of suitable technologies and design/execution of a robust interface for using the organizations existing libraries.
- Implemented a wrapper interface to enable access of the organizations native libraries over a cloud server.
- The platform was developed using java with java native access libraries and tested on their existing ECU's.

Education

SSN College of Engineering [Affiliated to Anna University]
Chennai, India

B.E. IN COMPUTER SCIENCE AND ENGINEERING
Jun. 2015 - Exp. Jun. 2019

- Currently pursuing my 7th semester in the CSE dept.
- Clubs & Activities: SSN EDC (Entrepreneurship Development Cell); Coding Club; Developer Student Club
- Organized workshop on computational thinking for freshers.

Bala Vidya Mandir Sr. Secondary School
Chennai, India

HIGH SCHOOL
2001 - 2015

- Graduated with 94.6% in class 12 CBSE boards.
- Robotics program; interact club; organizing committee of school culturals.

Skills

Programming	Python, C, C++, JAVA, MySQL, JavaScript, Markdown
ML & DL Libraries	Numpy, Scikit-learn, Keras, TensorFlow, PyTorch
Data Analysis	Pandas, Matplotlib, Seaborn, Excel
Hardware	Comfortable with Raspberry pi and Arduino
Development	Familiar experience with HTML5, CSS, Android Studio, Django
OS	Linux and Windows environments, familiar with shell scripting
Languages	English, Tamil, Hindi, Sanskrit

Personal Projects

Poverty estimation using satellite imagery
- Ongoing project which is focused on identifying regions of poverty by combining deep learning and satellite imagery.

IOT enabled smart parking system (IEEE Xplore Link)
- Parking system prototype project used in commercial complexes (funded by the college after a formal selection process).
- Aim to bring about an efficient and dynamic system for parking vehicles in such complexes where the time spent searching for a parking spot is eliminated and congestion is reduced
- IOT model adopted to dynamically relay signals for real time monitoring.
- Presented a paper at ICCCSP 2018, an IEEE Conference

Stock Market Analysis
- Focused on deriving trends and patterns of certain select stocks using historical data.

Railway ticket reservation system
- Designed a mini railway ticket reservation system using Oracle JDBC and Oracle database as a part of my Database systems course project.

Volunteer Work

Make A Difference
Chennai, India

ACADEMIC SUPPORT VOLUNTEER
Aug. 2017 - PRESENT
- Make A Difference (MAD) is an NGO which works towards providing equitable outcomes to underprivileged children at shelter homes.
- Work involves teaching English, Mathematics and Science to high school students.

Interact Club
Chennai, India

SECRETARY
Aug. 2013 - Dec. 2014
- High school club which undertook philanthropic activities of the school such as visiting shelters and distributing food and supplies in underprivileged areas.

Interests & Awards

- Participate in various intra and inter college tech fests. Won 2nd place in a coding competition at a National Technical Symposium conducted by Madras Institute of Technology.
- Active participant in various online coding competitions/forums such as Codechef/HackerRank/Codeforces.
- Member of EDC (Entrepreneurship Development Cell) at college and participant in the various activities organized by them.
- Participate in Intra college basketball tournaments.

Relevant Coursework & Certifications

- Machine learning A-Z
- Python programming
- Data structures and algorithms
- Discrete Mathematics
- Advanced Calculus
- Operating Systems
- Computer Networks
- Compiler Design
- Theory of Computation
- Database Systems
- Artificial Intelligence
- Data Warehousing Data Mining