# PAVAN M G

# SOFTWARE ENGINEER

#### CONTACT

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Hitech City, Hyderabad, India - 500081

#### SKILLS

Interests: Data Structures and Algorithms, Deep Learning, Embedded Systems, Computer Vision, Web Devlopment

**Languages**: C/C++, Python, RISC V Assembly, Perl, HTML, CSS, Javascript.

**Frameworks**: Keras, Tensorflow, OpenCV, Tkinter.

Tools: Perforce, Git, MS Office, MATLAB.

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#### EDUCATION

#### B.Tech - Electrical Engineering 2021 Indian Institue of Technology, Varanasi Grade: 8.31

Academic Courses: Al, Applied Deep Learning, Natural Language Processing, Parallel Computing, Data Structures and Algorithms, C Programming, Probability and Statistics, Calculus, Numerical Techniques, Digital Electronics, Control Systems, etc.

# XII Std - PUE, Karnataka 2017 FIITJEE P U College, Bengaluru

Percentage: 85.17

**Academic Courses**: Computer Science, Mathematics, Physics and Chemistry.

X Std - KSEEB, Karnataka 2015 Abhinava Bharathi High School, Mandya Percentage: 97.92 (School Rank 1)

# CERTIFICATION

**Coursera:** Machine Learning by Stanford University. Deep Learning Specialization by Deep Learning Al. Data Structures and Algorithms Specialization by UC San Deigo.

**Hackerrank:** Problem Solving, C, C++ and Python.

#### **PROFILES**

Linkedin | Github | Hackerrank | Leetcode

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### LANGUAGES

English, Kannada and Hindi

#### WORK EXPERIENCE

#### **Qualcomm India Private Limited, Hyderabad**

**DDR Software Systems Engineer** 

OCT 2022 - PRESENT

• Enabling DDR Features for Chip Station Modem Device of 3 Variants.

**DDR Software Systems Engineer, Associate** 

MAY 2021 - OCT 2022

 Enabling DDR Features for Value Tier Chipsets which includes Snapdragon 600 and 400 Seies

**DDR Tools Development Interim Intern** 

MAY 2020 - AUG 2020

DDR Eve Health Classifier Tool

- Built Algorithms to map the relation of Vref and CDC of DDR PHY into 2D Array
  Data called DDR Eye Plot for enabled DDR Frequencies and Read/Write
  operations on DDR Sub\_System of a referenced Chipset.
- Generated Synthetic data that mimicked the Eye Plot data from scratch to get Eye Plot samples of Specific Classes from it.
- Developed a Multiclass Learning Model using CNN from the data generated, and built a framework for getting the summary of belonging class and feature parameters of Eye Plot on Test SoCs.
- Received a Pre-Placement Offer.

# FEATURED PROJECTS

Fully functional Self-driving Car Simulation.

JAN 2020 - DEC 2020

B. Tech Thesis Project. Advisor: Prof Shyam Kamal, EEE, IIT (BHU), Varanasi.

- Used Computer Vision techniques like Hough Transform via OpenCV to identify lane lines.
- Trained Convolutional Neural Networks to identify various traffic signs.
- Trained Convolutional Neural Networks via behavioral cloning techniques to predict the driving steering angle based on image data from left, center, and right-mounted cameras using Keras Framework.
- Built a fully functional model to Self-Drive the Simulator car by Udacity.

#### Modelling and simulation of photovoltaic cell

FEB 2019 - APR 2019

Exploratory Project. Advisor: Prof V N Lal, EEE, IIT (BHU), Varanasi. Used

- Used, Simulink programming environment (MATLAB) to implement the Electrical modeling of PV cells.
- Developed, Mathematical modeling of IV characteristics in the form of continuous piecewise functions using regression.
- Generated the graphical results of the above for various specifications

# Other Projects:

Brain Tumor Detection using Genetic Algorithms. Assembling Genomes Using de Bruijn Graphs. Sort-Term Load Forecasting using LSTM Networks.