

# BAVESH BALAJI

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## EDUCATION

### Institute of Information Technology, Design and Manufacturing, Kancheepuram, India

Jul 2018 – Present

*Bachelor of Technology, Computer Engineering (CGPA: 9.01/10)*

*Coursework - Pattern Recognition, Linear Algebra, Operating Systems, Probability and Statistics, Advanced Data Structures and Algorithms, Design and Analysis of Algorithms, Computer Architecture, Database Management Systems, Computer Organization, Calculus, Probability and Statistics, Discrete Mathematics, Differential Equation*

### P S Senior Secondary School, Chennai, India

Jul 2008 – May 2018

*Senior Secondary Examination CBSE (94.2%)*

## EXPERIENCE

### Computer Vision | Quantrium Tech., Chennai, India

May 2021 – Present

- Working on a multi object tracking algorithm to track animals from camera trap videos.
- Developed a classifier to classify over 200 different types of animals with accuracy of 88%
- Working on Google Cloud Platform.

## PROJECTS

### Mask Detection | Python, DarkNet, OpenCV

Jun 2021 – Jun 2021

- Automated detection of whether masks are worn or not using YOLO-V4, achieving a MAP score of 70%

### Multi-threaded path tracer | C, POSIX

Oct 2020 – Dec 2020

- Implemented a multi-threaded path-tracer using the concept of global illumination to render a scene description illuminated by an existing light source from the perspective of a preset camera
- Used POSIX threads for multithreading
- Can render a sample of 200 SPP(samples per pixel) in less than 25 minutes.

### StudyBuddy, the online classroom | HTML, CSS, Bootstrap

Oct 2020 – Dec 2020

- Worked as a front-end developer in a web application that helps teachers conduct assignments and examinations effectively during the lockdown.
- This application allows faculty to broadcast their course material, put out assignments and even grade them.




## HONORS & AWARDS

- **Codeforces** : Max rating of 1644 as expert (top 4% in India)
- **Codechef** : 5-star rated (top 0.9% in the world).
- **AtCoder** : Max rating of 1383 (top 10% in the world)
- **ACM-ICPC** Member of team Our First Trie which ranked 222nd in Gwalior-Pune regionals(2021).
- **Google Kickstart 2021** Best ranks 863, 742
- **Google CodeJam 2021** Rank 2027 in round 1

## SKILLS

- **Programming Languages:** C, Python, C++
- **Frameworks:** Tensorflow, PyTorch, Matplotlib, Numpy, Scikit-Learn, Pandas
- **Tools & Technologies:** Google Cloud Platform, Git, Linux

## LICENSES & CERTIFICATIONS

- Neural Networks and Deep Learning 
- Improving Deep Neural Networks: Hyperparameter Tuning, Regularization and Optimization 
- Structuring Machine Learning Projects 
- Hackerrank Problem Solving 