B BAVESH

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Education

- **Indian Institute of Information Technology, Design and Manufacturing** — Kancheepuram, India
  Bachelor of Technology in Computer Science — *Jul 2018 - Present*
  - Supervisor : Dr Masilamani
  - Cumulative GPA : 9.01/10
- **P.S Senior Secondary School** — Chennai, India
  Higher Secondary School — *Jul 2007 - May 2018*
  - Higher Secondary Percentage : 94.2%

Work Experience

- **Quantrium Tech** — Chennai, India
  Computer Vision - Industrial Intern — *May 2021 - Present*
  - Performed object detection on images from camera-trap using Microsoft's *MegaDetector*
  - Worked in Google Cloud Platform and built an *efficientnet-b5* based classifier to classify over 200 species from camera traps videos and increased the accuracy from 85% to 89%
  - Currently working on tracking of fishes from highly occluded and low-frame rate videos.
- **Indian Institute of Technology** — Roorkee, India
  Computer Vision - Research Intern — *Nov 2021 - Present*
  - Supervised by Dr Partha Pratim Roy
  - Working on synthetic data generation using Virtual Reality and Computer vision

Skills and Interests

Languages: C, C++, Python

Frameworks: PyTorch, MatplotLib, Numpy, Scikit-Learn, Pandas, Seaborn

Interests: Applied Deep Learning, Computer Vision, Sports Analytics

Course work

- Data Structures and Algorithms
- Pattern Recognition
- Discrete Mathematics
- Advanced Data Structures and Algorithms
- Calculus
- Operating Systems
- Database Systems
- Linear Algebra
- Computational Engineering
- Deep Learning Specialization
- Design and Analysis of Algortihms
- Probability Theory
- Differential Equations
- Computer Architecture
- Human Computer Interaction

Projects

- **CoDoH: Classification of DNS over HTTPS** | Machine Learning, Network Security — Feb 2021
  - Used machine learning to build two statistical models, one for classifying network traffic as DoH vs non-DoH, and the other for classifying benign DoH vs Malicious DoH
- **Mask Detection** | Computer Vision, Deep Learning — Oct 2020 - Dec 2020
  - Implemented a detector that detects whether people are wearing masks or not.
  - Used YOLOv4 for object detection and achieved an MAP of around 70%

Extra Curricular

- Secured rank 222 in ACM-ICPC Gwalior Pune regionals and rank 342 in Amritapuri Regionals — Jul 2021
- Secured ranks of 863 and 742 in Google Kickstart 2021 — Mar 2021 - Nov 2021
- Qualified for round 1 and secured a rank of 2027 in Google CodeJam 2021 — Mar 2021 - Jun 2021
- Expert in Codeforces, max rating of 1644.(top 4% in India) — Nov 2019 - Apr 2021
- Max rating of 1383 in AtCoder(top 10% in India) — Feb 2019
- 5-star in CodeChef, max rating of 2049.(top 3% in World) — Feb 2019
- Won special mention in Start-up Weekend Hackathon conducted by CEG Guindy, Chennai — Feb 2019
- Got selected as one of the top 80 ideas in EHIPASSIKO out of 200 teams, an intra-college Hackathon — Nov 2019
- Won Second Place in CODERA conducted by SSN College of Engineering — Sep 2021
- Qualified for round 2 in Codechef Snackdown'21 — Sep 2021
- Mentoring college students on how to start competitive programming — Aug 2021 - Present