Deval Shah

Portfolio 🔗 ⓞ Ⓜ

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EDUCATION

- **School of Engineering and Applied Sciences, Ahmedabad University** — Ahmedabad, India
  Bachelor of Technology in Information and Communication Technology; GPA: 3.25 — *July. 2014 – May. 2018*

- **Asia English School** — Ahmedabad, India
  Higher Secondary Education; GPA: 3.68 (9.2/10.0) — *Aug. 2012 – March. 2014*

EXPERIENCE

- **Uncanny Vision** — Bangalore, India
  Software Engineer — *July 2018 - Present*
    - **Automatic Traffic Control System(ATCS)**: Developed a robust object tracking model using C++ in ATCS pipeline which improved accuracy of unique traffic congestion count from 83.5% to 91%.
    - **Neural Network Optimization**: Implemented a neural network that effectively pruned an object detection model by 20%(reduction in training parameters) with 2.6% accuracy loss and nearly 3x performance gain.

- **Uncanny Vision** — Bangalore, India
  Research Intern — *Jan 2018 - May 2018*
    - **Optical Character Recognition**: Designed the architecture of Optical Character Recognition(OCR) model on the top of base configuration and improved the accuracy of overall system from 82% to 89%.
    - **Object Tracking**: Designed and implemented generalized tracking model in C++ in Automatic Number Plate Recognition(ANPR) system pipleline and handled repeat license plates issue in a live camera feed.
    - **Bug Fixes**: Stability issues like memory leaks, job scheduling during multi-threading, managing CPU loads etc. during initialization of multiple instances of Automatic Number Plate Recognition(ANPR) system were fixed.
    - **Hyper-Parameter Tuning**: Reduced the training time by 11% by tuning different hyper-parameters in PyTorch framework.

- **School of Engineering and Applied Sciences, Ahmedabad University** — Ahmedabad, India
  Teaching Assistant — *Aug 2017 - Dec 2017*
    - **Data Analytics and Visualization**: Hosted weekly tutorial programming sessions on data mining tools, statistical analysis and visual representation of data.

      Jan 2016 - May 2016
    - **Data Structures and Algorithms**: Conducted tutorial sessions, curated theory/lab assignments and counselled students on academic matters.

PROJECTS

- **Pedestrian Detection**: Azure based modified Yolo v3 framework to detect persons in highly dense environment with .4% accuracy on caltech dataset.
- **Visual Question Answering**: Deep learning system that answer questions based on an image built using Keras using CNN and LSTM architecture.
- **Face Image Generation**: Using deep convolutional generative adverserial networks(DCGAN), generated real world like face images in latent space of input dataset.
- **Gesture Controlled Robot**: Robot built using AtMega 32 chip and controlled using 3 axis accelerometer sensor adxl335.
- **Text Encryption Tool**: Encryption tool built for text files using blowfish encryption algorithm in Java with GUI.

PROGRAMMING SKILLS

- **Languages**: Python, C++, C, Java, SQL   **Frameworks**: Azure, PyTorch, Keras , Django, Torch

Administrative Responsibilities

School of Engineering and Applied Sciences, Ahmedabad University   Ahmedabad, India
Treasurer   *Jan 2016 - Dec 2017*

- **Event Management Committee**: Managed the financial aspects of the events held in the college.Arranged sponsorship for the events.

Member   *Aug 2016 - Dec 2017*

- **Technical Committee**: Organized hackathons, inter-college tech quiz competitions, tech talks etc. Developed a website for the registration of events.

Yuva Unstoppable, NGO   Ahmedabad, India
Member   *May 2016 - July 2016*

- **Mentor**: Taught basic programming in C to more than 30 underprivileged kids.

Honors and Awards

Inter College Hackathon   *July 2017*
Runner's Up

- **Computer Vision Tool**: Developed a plug and play tool using Javascript PSX and WebGL libraries enabling user's to make simple computer vision applications using gui and generating code in the background.

CII Smart Cities Competition   *Nov 2017*
Finalist

- **Smart Surveillance**: Presented a design solution of smart surveillance in cities, enabling smart vision in CCTV cameras using AI techniques.