Deepti Mahesh

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My WebPage

EDUCATION

International Institute of Information Technology
Hyderabad, India
B.Tech | Computer Science | Honors
Expected Grad. May 2021

- Editor (2019-20), Writer (2017-) at College Magazine, Ping!
- College Sports Coordinator (2018-19)
- Mentor for Incoming Freshmen (2018)
- 4x100 Relay, TT Winner (2017)

SKILLS

Operating Systems:
Linux (Ubuntu, Kali), Windows
Languages:
C++, Python, Java, C, C#, Bash, Racket, Elm (**Functional**)
Databases:
CosmosDB (Azure), SQL
WebDev:
HTML5, JS, CSS, React (Plotly), Flask
Libraries & Platforms:
pytorch, tensorflow, pandas, openCV, numpy, matplotlib, scikit-learn, scipy
Tools:
Git, Vim, Adobe AE & PS, Unity, Blender, LaTeX

HACKATHON | OSS

Games for Good | GameJam
- By Indo-American Consulate
- Won Best Design WorkFlow (C#)

IIIT Gameathon: Level Up!
- Won Best Design and Art (Unity, C#)
- Stood 4th out of 20 teams

Outreachy Application | Mozilla Firefox
- Worked on Federated Learning loss function to Optimize Search

COURSEWORK

Computer Vision | Image Processing
Statistical Methods in AI | AI
System Software Analysis & Design
Optimization Methods | Algorithms
Operating System | Database System
Computer Networks | Data Structs
Engineering Systems | Discrete Math

EXPERIENCE

StanceBeam May 2020 – Aug 2020
Computer Vision Intern Bangalore, India

- Designed & built state-of-the-art, deployable model for Detection of Events in Cricket
- Involved audio and video analysis of data i.e, annotation of videos and developing a working ML model by reference to various academic literature. Implemented Python-Azure stack for deploy capabilities.

Cognitive Science Lab + Computer Vision July 2019 – present
Research Intern | Honors Hyderabad, India

- Working on publishing a paper (ETRA 2020) involving Kin Detection & Correlation wrt face matching algorithms and human observations. Utilizes LIME for Interpreting ML for Image Classification & Similar features.
- Python | pytorch | Tobii Eye Tracker and Studio

Happiest Minds Technologies May 2019 - July 2019
Data Analyst Intern | Developer Bangalore, India

- Worked on Business Intelligence, Machine Learning and Explainable AI on a dataset and used tools such as Plotly Dash to create a dashboard for a visual demo of ML Workflow.
- Involved interpreting of results obtained through ML models with the utilization and understanding of libraries such as LIME, Eli5, etc.

IIIT Product Labs Aug 2018 - Nov 2018
Application Developer CIE, Hyderabad, India

- Led a three person team in building a POC using LTRC and Google Translation APIs to translate patient informed consent forms into regional languages for medical trials.
- Implemented the frontend features and backend server using ReactJS and Python

PROJECTS

2020 | Terrain Generation Computer Vision | Independent Study | ML | In Progress
Utilizing Conditional GANs and CNN + QGIS for generating a smooth Digital Elevation Model from a sparse sketch with a network of rivers, ridges and altitude cues.

2020 | Implicit Decoder CV Final Project | pytorch
Implemented GAN, CNN encoder, decoder for better Generative Shape Modeling such that network learns Implicit Fields. Based on paper published in arXiv 2019.

2020 | Computer Vision & Image Processing CV Algorithms | openCV, pytorch, numpy
Implemented Segmentation, Flood-Fill algos, Instance Detection and Tracking, CNN network, Optical Flow and Stereo Rectification for various applications.

2019 | Painterly Digital Image Processing | openCV, numpy
Workflow and algorithms implemented to convert a picture into a painting characterized by brush strokes of varying size and type.

2019 | Tic Tac Toe Bot Artificial Intelligence | Python
Bot built using min-max algorithm and alpha-beta pruning & pitted against other bots.

2019 | Shell | Server Operating Systems | Computer Networks | C | Python

- Created a shell to mimic Bash (Linux) and support features like piping, etc.
- Implemented multi-proxy server with blacklisting features.

2018 | Game Development OpenGL | C++ | Python
2D & 3D Games Implemented: Mario on Terminal, Subway Surfers clone, Flight Simulator, Space Invaders & Jetpack Joyride

2018 | Quiz Portal & Chat Room Flask | SocketIO | ReactJS | Go
Built a web app to support different formats of quizzes, corresponding leader boards & Private Chat Rooms.