KEVIN SHAH

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EXPERIENCE

- Implemented a machine learning model to cross-sell products.
- Collected, processed and analysed data for feature engineering.
- Worked with SQL, Matplotlib, Pandas, Scikit Learn, and XGBoost.

- Learned about Generative Adversarial Networks (GANs), Neural Architecture Search (NAS), and Learning by Passing Tests (LPT).
- Implemented GANs on CIFAR10 with varying architectures.
- Implemented LPT using a GAN on CIFAR10 and Learning by Self Exploration on chest X-ray images of patients with pneumonia.

Website Developer Theodesh Consultants

July, 2020

- Worked with forms, database queries, and progressive web apps.
- Worked with HTML, CSS, JavaScript, PHP, PostgreSQL and Apache.

PROJECTS

Neuro-Symbolic Image Manipulation Parag Singla = 2022

- Created a dataset CLEVR-MAN for image manipulation.
- Implemented our own Neuro-Symbolic model on CLEVR-MAN.
- Showed generalizability and interpretability of our model with zero shot out of distribution and low data experiments.

OS Kernel Shell Sorav Bansal

January-April, 2022

- Implemented a shell with personalized UI using MMIO and PMIO.
- Implemented coroutines, fibers, preemption, SPSC queue.

Reading Embedded Captions Parag Singla November, 2021

• Implemented a CNN based encoder and RNN based decoder architecture to extract captions embedded in noisy images.

Grid World Rohan Paul
November, 2021

• Implemented various RL algorithms, such as value iteratation, policy iteration, q-learning and sarsa, on a grid world. Compared on and off-policy algorithms with various hyperparameters.

Nurse Rostering System Rohan Paul October, 2021

• Implemented an optimized nurse rostering system as a CSP.

Maze Game Rijurekha Sen
April-May, 2021

- Created a maze game in C++ using SDL2, sockets and pthreads.
- Implemented collision mechanics, multiplayer support over local network, bots, textures, animations, projectiles and collectibles.

MIPS assembly simulator Preeti Panda im March-May, 2021

- Implemented a MIPS simulator to simulate MIPS32 assembly file on a multi-core cpu with DRAM with row column access latency.
- Added support for out-of-order and non-blocking execution.

Traffic Density Estimation Rijurekha Sen | Feb-March, 2021

- Used OpenCV to estimate static and dynamic traffic density.
- Compared time versus accuracy trade off by lowering resolution, skipping frames, multi-threading, and using different algorithms such as optical flow, background subtraction, finding contours.

STRENGTHS

Hard-working

Problem solving

Technical skills

Inquisitive

TECHNICAL SKILLS

Machine Learning

- Proficient in Machine Learning algorithms (Linear and Logistic Regression, Decision Trees, SVM, GDA, and Naive Bayes).
- Proficient in Neural Networks (DNN, CNN).
- Proficient in Reinforcement Learning.

Web Development

• Experience in full stack web development using Django, Flask, MERN stack, SQLite, Bootstrap, PostgreSQL, and Apache.

Programming Languages & Libraries

- Proficient in Python, Rust, C, C++, JavaScript, Java, Haskell, Dart, and Julia.
- Proficient in Numpy, Pandas, Tensorflow, PyTorch, Scikit-Learn, Matplotlib, Scipy.

MOST PROUD OF



JEE(Adv.) and JEE(Main)

All India Rank 85 (Adv.) and 260 (Main)



Indian National Olympiad (INO)

Selected in OCSC for Chemistry and appeared in INPhO and INAO.



Indian National Mathematics Olympiad (INMO)

Appearead twice for INMO.

EDUCATION

B.Tech. in Computer Science and Engineering Indian Institute of Technology,

Delhi July 2019 - June 2023 CGPA: 9.3

Higher Secondary Education Pioneer Convent 2017 - 2019 Marks: 94.8%

Secondary Education Navrachana International School

2015 - 2017 CGPA: 10.0