Sumukh S

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EDUCATION

IIIT, HYDERABAD
MS (RESEARCH)
COMPUTER SCIENCE, NLP
Advisor: Dr Manish Shrivastava
Lab: MT-NLP lab, KCIS
Expected June 2021 | Hyderabad, IN

B.TECH (WITH HONORS)
COMPUTER SCIENCE
Expected June 2020 | Hyderabad, IN

VVS SARDAR PATEL
HIGH SCHOOL | BANGALORE, IN
Science and Electronics

CONTACT

Github: nonejk
LinkedIn: sumukh-s
Skype: link

COURSEWORK

Natural Language Processing (1 & 2)
Information Retreival and Extraction*
Opimization Methods
Statistical Methods in AI (Intro to ML)
Speech Technology
Database Systems
Distributed Systems*
Compilers*
Artificial Intelligence
Computer Graphics
Computer Networks
Operating Systems
Data Structures and Algorithms

TECHNICAL SKILLS

Programming languages:
Python • C • C++ • Bash
ML/DL/NLP:
PyTorch, NLTK, scikit-learn
Others:
Git • LaTex • OpenGL • MySQL • Matlab • Flask • JS • HTML • CSS • MongoDB

AWARDS

Best review paper, Algorithm course, 2017
Indian National Mathematics Olympiad (INMO) Finalist, 2011

EXPERIENCE

INDIAN SCHOOL OF BUSINESS (ISB) | ML & SWE INTERN
Aug 2019 – Present | Hyderabad, IN
- Working with Center for Analytical Finance (CAF) to create tools for loan approval process automation and bank transaction analysis using statistical machine learning algorithms.

IIIT-H NLP LAB | UNDERGRADUATE RESEARCH ASSISTANT
Apr 2018 – Present | Hyderabad, IN
- Currently working on extraction of key elements from unstructured legal documents. Previously worked on multimodal representation for Visual Question Answering [VQA]. Created webapps to showcase different models.

ONWARD HEALTH | DATA SCIENCE INTERN
May 2019 – June 2019 | Hyderabad, IN
- Built models for identification of cancer in liver tissue WSIs & segmentation of affected areas using deep learning algorithms for computer vision.

MARKETFRONT SOFTWARE SOLUTIONS | SWE INTERN
Aug 2017 – Nov 2017 | Hyderabad, IN
- Led a team of 3 and built an android application, a webapp and a RESTful API for the clients to fetch and update details of the products in their inventory.

PROJECTS

CROWD FLOW PREDICTION AND CLIENT DISCOVERY USING WIRELESS NETWORKS | PYTHON, C, RASPBERRY PIS
Big Data and Policing | Spring 2019
This was a project on identifying crowd patterns by WiFi requests sent by mobile devices. The client locations can be triangulated. This data was also used to create heat-maps and perform time series analysis using ARIMA and Prophet.

WIKIPEDIA SEARCH ENGINE | PYTHON
Information Retrieval & Extraction| Monsoon 2019
Uses Block-Sort-Based-Indexing to create the inverted index of the entire WikiPedia dump (73.3 GB), queries on the index and retrieves top 10 results via relevance ranking of the documents, implemented using tf-idf scoring.

VISUAL QUESTION ANSWERING MODEL | PYTHON, PYTORCH
Natural Language Processing | Monsoon 2018
Takes an image and a question about the image as the input, and predicts the answer to the question. Used **Bilinear Attention Networks [BAN]** in the model.

MINI-DROPBOX: P2P FILE SYNC | C++
Computer Networks | Spring 2018
Implemented an Application Level program for a P2P-network to keep two separate directories synced, similar to Dropbox. Used sockets to communicate; maintained file-indices, and MD5 hashes on all peers.

LINUX SHELL | C
Operating System | Monsoon 2017
Command line interpreter which supports background jobs, environment variables, signal catching, piping and redirection with extensive error-handling.

OTHER PROJECTS | [LINK]
Ultimate Tic-Tac-Toe bot (Python), Pacman killer like game (2-D) & Legend of Zelda (3D) like game (C++, OpenGL), HTTP proxy server with cache (Python), Quiz webapp (Ruby on Rails), SQL Engine (Python).