NITIN CHOUDHARY

Mathematics and Computing Major

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EXPERIENCE

Member of Technical Staff
Cohesity

Aug 2020 – Present   Pune, India

- Working as a member of Datapath Team, which deals with all filer operations in the data storage domain.
- Building tools for NAS migration and a planner which allows user to plan their migration based on insights from data.
- Exposure to full stack development, with Angular in UI and Go in backend.

Google Summer of Code Developer
Sunpy (Open Astronomy)

May 2017 – July 2017

- Wrote a full-fledged high-level JSOC Client, using drms package as its backend, to download astronomical data from JSOC servers.
- Wrote a full test-suite to cover the drms package, using pytest and different mock testing packages.

Summer Research Intern
Naver Labs Europe

May 2019 – July 2019   Grenoble, France

- Worked on the problem of Layout Understanding of documents, with Restaurant Menus as the dataset, in order to translate it.
- Formulated the problem as a Graph classification and segmentation, using GraphCRF and custom Edge-conditioned convolution to achieve the desired results.

Summer Research Intern
University of Alberta, Canada

May 2018 – July 2018   Edmonton, Canada

- Built a predictive model to detect Schizophrenia among patients from brain's 4D fMRI scans giving over 87% accuracy.
- Created an ensemble model to incorporate the feature knowledge from all the parcellations, in addition to applying 3D convolutions on ReHO data of fMRI scans.

Python Developer Intern
Thinkerbell Labs

Dec 2017   Bangalore, India

- Worked on the source code of the company's flagship device Annie, which is a handy Braille tutor to bring learning and writing in reach of visually impaired people.
- Implemented connection of the device to the server using websockets so as to remotely monitor the device through an android or iOS device.

EDUCATION

Indian Institute of Technology Kharagpur
Int. MSc in Mathematics and Computing

July 2015 – June 2020

- GPA: 8.1/10

TECHNICAL SKILLS

C++   C   Python   JavaScript   Go   Angular   Flask   NumPy   Pandas   PyTorch   Tensorflow   Git   Linux

PROJECTS

Contextual Emotion Detection in Text
- Built a model that would detect contextual emotion in a conversation between 2 people.
- Used attention and hierarchial attention models with Bi-LSTM units to capture the context.
- Used character level representation along with word embeddings to understand the conversation slangs and typos.
- Work selected for poster presentation at NAACL 2019, Minneapolis, USA.

Accio Kindle Highlights
- Built a cross-platform electron app to automatically sync all the e-reader highlights to a dedicated folder on Google Drive.

MaterialPlus Graphite Flakes Detector
- Built a Convolutional Neural Networks model, to identify between 5 different types of graphite flakes present in grey cast iron.
- Used both Tensorflow and Torch as independent platforms to implement the neural network problem.

EXTRA CURRICULARS

Kharagpur Open Source Society
- Served as Executive Head to the club, to promote love and use of open source in and around campus.
- Conducted Kharagpur Winter of Code, a program to introduce people to open-source development.
- Conducted Linux-install fest in the campus, to promote use of Linux as the preferred operating system.
- Regularly conducted Python Classes and Git workshop, to teach students the process of contributing to an open-source project.