Dhruv Mongia

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Education

Pennsylvania State University   Harrisburg, PA
MS Computer Science, GPA: 3.39/4.0   Aug. 2019 – Dec. 2020
Artificial Intelligence, Neural Networks, Design and Analysis of Algorithms, Adv. Operating System, Adv. Database Management System

Guru Gobind Singh Indraprastha University   Delhi, India
B.Tech Information Technology, GPA: 8.76/10.0   Aug. 2015 - May 2019
Data Structures, Object Oriented Programming, Computer Architecture, Cryptography and Network Security, Java Programming, Cloud Computing, Mobile Computing, Ad-hoc and Sensor Networks, Wireless Networks, Mobile Computing, Soft Computing, Theory of Computation

Skills

Python, Java, Kotlin, C++, HTML, CSS, JavaScript, Node.js, Angular, Ember.js, Ionic, SQL, MongoDB, DynamoDB, Elasticsearch, TensorFlow, AGILE, Git, AWS, Arduino

Experience

Software Developer Intern   May 2020 - Aug. 2019
Amazon   Seattle, USA
Drove the design and implementation of a full stack project (Kotlin, Java, Node.js, Ember.js) which provides insights into a newly developed event-based transaction data store. Resolved for the following:
- Provision of controlled UI-driven query generation
- Deployment of extensible service-oriented APIs to serve UI requests and future applications
- Query translation into DynamoDB/Elasticsearch
- Provision of asynchronous report generation on S3

Research and Development Intern   July 2018 - Mar. 2019
MHRD Innovation Cell, Govt. Of India   Delhi, India
- Deployed an event management portal using QR code-based system to hasten the process of marking attendance
- Developed the frontend for the official government website: mic.gov.in promoting government's innovative initiatives
- Drove the prototype for Institute Innovation Council portal promoting entrepreneurship mentality in senior secondary schools.

Projects

Wireless Sensor Network with Real Time Deep Learning   Jan. 2020 - May 2020
- Developed a system which collects streaming data from heterogeneous sensor networks and returns an analysis using deep learning.
- Specifically, targeted time-critical environments where data analysis results must be computed in deterministic time.
- Reasonably accurate query analysis results can be obtained within the deadline using the proposed method even if some sensor data is missing due to sensor network failure.

Liver Disorder Prediction   Aug. 2019 - Dec 2019
Compared and contrasted the accuracy, sensitivity, specificity and precision of liver disorder prediction on the ILPD data set using back propagation and random forest techniques testing different hyperparameters

IPU-GO   Aug. 2019 - Dec 2019
Developed the server using Node.js for the official mobile application of my university providing one stop destination to students and faculty to access academic data, events, and major happenings.

Additional Qualifications/Experience

Teaching Assistant: Penn State University   Aug. 2019 – Dec. 2019
Assist professors with grading undergraduate Computer Science courses such as Algorithm Design and Analysis, and Introduction to Programming Languages

President of International Organization of Software Developers (MAIT)   Aug. 2017 - Aug. 2018
- Hosted extra curriculum classes imparting technical knowledge such as web/app development, machine learning, competitive programming and photoshop. Also mentored students on live development projects.
- Organized technical workshops, and events such as hackathons and competitive programming competitions.

3rd position at IIIT's Allahabad Hackathon   Aug. 2018
Developed an automatic ecosystem using Android, Node.js and Arduino that allows users to water their plants by the touch of a button depending on the moisture level of soil regardless of their distance from the plants.

Volunteered at Let's Educate Children in Need (LECIN)   Feb. 2017 - Feb.2019
Imparted quality elementary education to the slum children who are otherwise deprived of basic amenities