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## EDUCATION

**UNIVERSITY OF CALIFORNIA, DAVIS**

California

• **Master's in Computer Science (GPA: 4.0/4.0)**

Sep 2018- Dec 2020 (Expected)

- Coursework: Operating Systems, Analysis of Algorithm, Machine Learning, Artificial Intelligence, Distributed Database Systems
- Graduate Teaching Assistant for CHE2A and ECS 20 (Discrete Math for CS)

**INDIAN INSTITUTE OF TECHNOLOGY (IIT-BHU), VARANASI**

India

• **Bachelor of Technology in Electrical Engineering (GPA: 9.17/10.0)**

July 2014– May 2018

- Coursework: Computer Programming, Mathematical Modelling, Operations Research, Macroeconomics, Probability and Statistics
- Undergraduate Teaching Assistant for CSO-101, Computer Programming (Data Structures and Algorithms)

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## SKILLS

- **Programming Languages:** C, C++, Python, Java, Shell Scripting, Verilog, SQL, HTML
- **Technologies:** AWS (S3, DynamoDB, EMR), Git, MATLAB, JUnit, PHP, Tableau, TensorFlow, Eclipse, IntelliJ, Guice, Apache Hive
- **Interests:** Data Structures, Algorithms, Database management, Analytics, Solving puzzles

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## WORK EXPERIENCE

**AMAZON.COM INC, United States****Software Development Engineer Intern**

June - September 2019

- Part of Amazon's Remarketing Engineering - Paid Search team that is responsible for Amazon's Paid Ads (text ads and shopping ads) on Search Engines like Google, Bing and Yahoo.
- Designed and implemented an end-to-end internal service using AWS technologies like SQS, S3, DynamoDB and EMR.
- Service runs daily to accept the Amazon's customers' requests to retrieve their data that Amazon (paid search) uses. Requests are responded by the customer specific data, stored by the team.
- **Exposure:** Java, SQS, DynamoDB, EMR, EDX, JUnit, Guice and Hive

**MENTOR GRAPHICS LIMITED, India****Software Development Intern**

May - July 2017

- Worked as part of CDC (Clock Domain Crossing) team of company, for development of lint tool for HDLs (Hardware Description Languages) to check for potential mismatch towards simulation and synthesis
- Added 20 checks in the lint tool and for each check, programmed around 50 test cases in Verilog/System Verilog to test the lint tool
- My contribution directly benefited the company and helped them meet the deadline for development of tool
- **Exposure:** C/C++, GDB (GNU Debugger), Shell Scripting, LINUX, Verilog/System Verilog

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## PROJECTS

**Peer-to-Peer File Backup System****Operating Systems, 2019**

- Implementing a distributed P2P file storage and Backup System focusing on reliability (avoiding churning) and high bandwidth operation.
- **Exposure:** Google Cloud Platform, Python, Shell script

**Fake review Detection****Machine Learning, 2019**

- Trained a model on Yelp review data set to identify fake reviews using various techniques like Doc2Vec, FastText and LSTM and compared the results in different scenarios.

**Design Visualizations****Information Visualization, 2019**

- Designed Choropleth Map, TreeMap and Dotted Map Visualizations. Designed Zoomable TreeMap using D3 and jQuery.
- **Exposure:** Tableau, HTML, Javascript, CSS, D3, jQuery

**Product Classification and Price Prediction****Artificial Intelligence, 2018**

- Trained Faster-RCNN on base network of VGG-16 and Inception Resnet V2 that will allow user to identify multiple objects along with their prices in the input image. Product-price dataset is generated using Amazon's database and Open Images Dataset V4 is used for images
- **Exposure:** Deep Learning, Neural Networks, TensorFlow, Keras, Google Colaboratory

**Tuning of PID and fractional PID Controllers****Control Systems, 2017**

- Tuned PID controller for Inverted Pendulum on Cart model and tuned fractional PID using Ziegler–Nichols-type rules on MATLAB.
- **Exposure:** Fractional calculus, Fractional PID, Robotics, MATLAB/SIMULINK

**Web-Based Library Management System****DBMS, 2017**

- Built a web-based application for controlling and monitoring the transactions in the library. **Exposure:** PHP, MySQL

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## ACHIEVEMENTS

- **Leadership:** Joint Secretary of Aero-Modelling Club, IIT BHU (organized national level events, workshops and competitions in college fest); Coordinator of Institute Day' 2017, IIT BHU (platform to showcase Engineering models and projects)
- **Achievements:** Featured in **PM of India's Mann ki Baat** show for organizing National level Airshow; Secured admission in Indian Institute of Technology (IIT-BHU) which is ranked 5<sup>th</sup> in India for Engineering education