# Hiren Mayani

H1115, Chapin apt., 700 Health sciences dv, stony brook, NY 11790

hmayani@cs.stonybrook.edu (631) 590-9957 www.hiren.tech | Linkedin| GitHub

#### **Academic Details:**

• MS in Computer Science, Stony Brook University, New York (GPA: 3.76/4)

Aug`17 - Present

o Coursework: Machine Learning, Database Systems, Analysis of Algorithm, Artificial Intelligence, Big Data Analysis, Parallel Programming, Computer Vision

• B.Tech in Computer Engineering, <u>Dharmsinh Desai University</u>, <u>India</u> (GPA:8.46/10)

July 11 - May 15

o Coursework: Data structures, Design & Analysis of Algorithms, Object Oriented Modeling, Operating Systems, Database System, Knowledge Discovery, Image Processing, Artificial Intelligence, Software Engineering

## **Work Experience:**

• Data Science Intern, GDA Corp

May 18 - Aug 18

- o Designed and implemented algorithms to find out cropland and segment crop fields from satellite imageries.
- o Entire process from downloading data from EUA sentinel-2 and USA Landsat-5 to assigning unique table to each crop field.
- o Land classification had ~83% accuracy and 9% fields were under-segmented.
- o Technologies: Python, OpenCV, Scikit-image,

# • Product Engineer(R&D), Edgeverve Systems

May 15 - July 17

Worked on COMPASS - A product developed to design and manage next-gen workplaces.

- O Built models to predict whether the user will show up or not with the help of classification algorithms like SVM, Logistic Regression, random forest, Naive Bayes etc. in R. Final classifier was having 81% accuracy.
- o Designed and developed SOA web services to orchestrate among different components of a highly integrated solution using Oracle Middleware. These services are being invoked 5,000+ times per minute through mobile, web and tablet applications.
- O Single-handedly developed an application using Elasticsearch, Java, and Kibana to analyze live email log data.
- o Technologies: Java, OracleDB, BPEL, ELK, node.js, MongoDB, R, Tableau

### • Software Engineering Intern, PupleDocs

Dec`14 - Mar.`15

Worked on digitalizing million+ paper-based medical documents and making them available online using cloud application.

- o Contributed in migration from SQLite to MySQL based web application which speeds up the application by 1.4 times.
- o Developed different RESTful services for document processing and searching which are being invoke by mobile apps and web application.
- o Technologies: Java, Restlet, MySQL, HTML, CSS3, js, Ajax

# **Projects:**

## • Length of Stay Prediction (TensorFlow, Python3)

Dec'17 - May'18

- o Developing different deep leaning and regression models to predict how long patient is going to stay in the hospital.
- o This work is being done with Dr. Jonas Almeida and we are using 15 million+ New York patients observations.

## • Shared Memory MapReduce System (C++, Cilk++, Spark)

Jan'17 - Apr'18

- o Implemented generic and more flexible shared memory MapReduce system in Cilk++, openMP and Cuda.
- o Compared performance of these implementations with Spark on stampede2 super computer and found it to be 1.4X faster.

### • Climate Dataset Analysis (Python3, Spark, TensorFlow)

Sept`17 – Dec`17

- Big Data Analysis course project in which we analyzed co-relation between climate change and deforestation using 100+ GB NOAA datasets.
- O Built predictive models for deforestation and climate forecasting using tensorFlow.

#### • Smart website loader (Java, PHP, javascript)

Dec`13 - Apr`14

- o Developed this system to detect website user's connection speed and serve content based on it i.e the user with higher connection speed will get better GUI while the user with lower connection speed will get degraded GUI.
- o International Center for Entrepreneurship and Technology funded this project for further development.

#### **Skill Set:**

- Programming Lang.: Python, Java, C++, MySQL, MongoDB, spark, OpenCV, R, C, Elasticsearch, Kibana
- Web-centric Skills: Javascript, Flask, Node.js, PHP, Wordpress, ASP.Net, HTML5/CSS3, jQuery
- Tools: SoapUI, Eclipse with SVN & Git, jDeveloper, Microsoft Visual Studio, IntelliJ, Tableau

#### **Achievements:**

- Website Development Head for DDUConnect.in (university magazine) for 2 years.
- Lead team of 7 people to develop a website of Felicific'14, an annual techno-cultural festival of the university.
- Won Code Relay coding contest organized by Infosys, India.