ABHINANDAN DUBEY

SOFTWARE DEVELOPER | DATA SCIENTIST

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HackerRank: https://www.hackerrank.com/alivcor | GitHub: https://www.github.com/alivcor

LinkedIn: https://www.linkedin.com/in/abhinandandubey | Webpage: http://www3.cs.stonybrook.edu/~adubey/

EDUCATION

Stony Brook University - MS in Computer Science

Courses: Computer Vision, Analysis of Algorithms, Artificial Intelligence, Big Data Analytics, Natural Language Processing,

Visualization & Visual Analytics, Fundamentals of Computer Networks.

New York, USA

Dec. 2017

2012-16

Birla Institute of Applied Sciences - B.Tech. (Honors) in Computer Science & Engineering

Uttarakhand Technical University | First Division with Honors, College Topper

Nainital, India

RESEARCH EXPERIENCE

Graduate Student Researcher | Human Interaction Lab | Stony Brook University

Spring 2017

Working on "Using Weakly Supervised Segmentation Methods for Fetching Insights from Biological Cell Division Process"

Innovator | Innovating For Billions - REDx | MIT Media Lab

January 2016

Research Publications

• CNN Based Yeast Cell Segmentation in Multi-Modal Fluorescent Microscopy Data CVMI - Proceedings of IEEE Conference on Computer Vision & Pattern Recognition (CVPR). Spring 2017

Classification of CKD Cases Using MultiVariate K-Means Clustering International Journal of Scientific & Research Publications - Volume 5, Issue 8 Fall 2015

A Simplified Analysis To a Generalized Restricted Partition Problem PRINCIPIA - Princeton Undergraduate Maths Journal, Princeton University

Winter 2015

WORK EXPERIENCE

Summer Analyst Intern (Risk Technology) | Nomura America Services, New York City

Jun - Aug 2017

- Developing modules that allow processing & seamless translation b/w in-memory DataFrames to Parquet Hadoop ecosystem
- Modules for processing of data streams in memory through the Data Access Layer. Also developing a dashboard that allows monitoring of the data processing requests, data viewer and drill downs, and batch processes.
- Working on POCs to evaluate technologies for low latency data provisioning.

PROJECTS More on GitHub

DeepScore & UnTraSE: A Two-Fold Exploratory Study on AES

A state-of-the-art research on trait-specific automated essay grading using deep learning, LSTMs, and unsupervised approaches.

AlexaFitnessPal - Winner at Hack@CEWIT 2017

An IoT & Microservices device with H/W sensors running Machine Learning & Vision algorithms to track activities.

Mosaicing of Aerial Images - Estimating transformations from the image points

A system that maps the correspondences in two images, warps and merges images into a mosaic which provides a larger FOV.

The Freefinity Project - Spatio-Temporal Analysis of NYC Cab Services Using Spark & Apache Hadoop Analysing commuting patterns in urban communities, and extracting useful insights from NYC cab system (Ongoing)

Scene Classification Using VGG16 and Logistic Regression CNN

Implemented CNN which extracts features from VGG16 Network and predicts the background scene with an accuracy of 81%

Sentiment Analysis Using Amazon EMR (Elastic MapReduce) & Spark

Built a program that runs over terabytes of data contains more than 1.72 billion web pages using Spark & Apache Hadoop.

TECHNICAL STRENGTHS

Proficient Python, Java, C, PHP, HTML, JavaScript, CSS, SQL, AJAX, D3

VB, C++, C#, .NET, IATEX, Bootstrap3, CodeIgniter, Smarty, Android, MongoDB, Flask Prior-Exp

MATLAB, TensorFlow, OpenCV, MapReduce, PyCharm, Visual Studio, Eclipse, Wireshark, Adobe Photoshop Tools

ACHIEVEMENTS More on Webpage

- OpenSource projects include **segraph**-a library for creating graphs from SLIC segments. (Published on Python Package Index)
- Award for Most Original Project HackCEWIT IoT Hackathon 2017 organized by the Center of Excellence in Wireless and Information Technology, Softheon and Major League Hacking.
- 2 Bronze Medals on HackerRank, currently at 90.34 Percentile with a Contest Rating of 1833.
- All India Rank 176 in JEST Theoretical Computer Science (Joint Entrance Screening Test, 2016)
- Global Rank 69 & All India Rank 18 in HackerRank: Real Data 2016 Data Science (AI) Contest
- Selected for the prestigious IIT-Bombay Research Fellowship Awards, 2015 under Dr. Niranjan Balachandran.
- Selected for MIT Media Lab RedX Innovation for Billions Camp 2016 & worked on building an Automated Diagnosis System.
- AMCAT Certified Software Developer 100%ile in Quant, 99.99%ile in Verbal & 97.8%ile in Programming in AMCAT.
- Awarded Merit Certificate from CBSE in Information Technology being All-India Topper in High School