Shibani Singh

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LinkedIn | Github | Website

SUMMARY

Cloud Solutions Engineer at Intel Corporation with a Master's thesis on "Deep Learning based Classification of FDG-PET Data for Alzheimer's Disease". Passionate about machine learning & deep learning. Programming skillset includes Python, C, Java & C++.

EDUCATION

ARIZONA STATE UNIVERSITY

M.S. in Computer Science | Eta Kappa Nu (IEEE Honors Society)
Graduated May 2017 | Tempe,AZ
Cum. GPA: 3.8/4.0

THE LNM INSTITUTE OF INFORMATION TECHNOLOGY

B.Tech in Computer Science
May 2015 | Rajasthan, India
Cum. GPI: 8.8/ 10.0

AWARDS

2014 Full Funding Scholarship to present, LWMOOCS Workshop, MIT
2011 INSPIRE (Innovation in Science Pursuit for Inspired Research)

COURSEWORK

GRADUATE

Machine Learning
Computer Architecture II
Mobile Computing
Software Security
Software Design
Game Theory with Applications
Advanced Computer Graphics
Advanced Geometric Modelling
Computational Conformal Geometry

UNDERGRADUATE

Linear Algebra
Scientific Computing
Design & Analysis of Algorithms
Information Security and Cyber Laws
Object Oriented Programming (Java)
Digital Image Processing
Data Mining

SKILLS

Programming Languages:
C • Python • Java • C++ • Scala • PHP • LaTeX
Applications:
BASH• Spark • CDH • MATLAB • Tensorflow • IntelliJ • Linux • MacOS • MySQL

CERTIFICATIONS

Oracle Certified Java Professional (2014)

PROFESSIONAL EXPERIENCE

INTEL CORPORATION | Cloud Solutions Engineer

June 2017 - Present | Oregon, United States
I work as a Software Engineer in the Data Center Group at intel where my responsibilities include software and hardware specifications, design, development and deployment of scalable Machine Learning use cases on distributed systems for Big Data Analytics.

INTEL CORPORATION | Software Engineer Intern

May - August 2016 | Oregon, United States
I contributed to the development of spark toolkit on the Trusted Analytics Platform TAP spark-tk, a spark based toolkit for developing machine learning based analytics solutions for distributed platforms and also did a side project where I benchmarked Deep Learning libraries (H2O Sparkling Water vs. Distributed Tensorflow) on distributed systems for the MNIST dataset.

INDIAN INSTITUTE OF TECHNOLOGY | Software Development Intern

January 2014 - May 2014 | Mumbai, India
I.I.T. BombayX MOOC is an initiative to provide an eLearning platform to students all over the world with the best possible education via interactive teaching, flipped classroom, and peer instruction. My responsibilities to understand & extend the open source framework provided by edX to accommodate the backend requirements of blended MOOC. I was subsequently invited to present my contributions at the LWMOOCs Workshop at MIT, Aug' 2014.
Tools Used : Python, Django, JavaScript, XML, mongoDB, MySQL

PUBLICATIONS/PRESENTATIONS

2018 Spark Summit - Deep Learning Based Opinion Mining for Bitcoin price Prediction
2017 Conference Paper, Master's Thesis - work funded by NSF - SPIE Journal
2017 Poster - Deep Learning, Arizona Alzheimer's Consortium
2017 Poster - Machine Learning systems, Arizona Alzheimer's Consortium

ACADEMIC PROJECTS

ALPHABETS, DETECTION OF AMERICAN SIGN LANGUAGE | Tools Used: Myo Sensor, R, Java, PHP

Developed an Android app to translate Sign Language Alphabet actions to readable text, also spelled out using wireless sensors. The context consists of signals collected from various sensors placed on the arm of a user using a wireless armband (Myo sensor).

SOCIALLY EXPRESSIVE PHYSICAL AGENT | Tools Used: 3D printer, PSoC Creator 4.0

Developed a 3D robot face from 3D printing it, to wiring, and programming it to be capable of displaying facial expressions.

SPHERICAL CONFORMAL PARAMETRIZATION | Tools Used: C++, Mesh Library

Implementation of gradient descent algorithm to find a unique mapping between any two genus zero manifolds by minimizing the harmonic energy of the map.

IMPLEMENTATION OF INSERTION POLICIES - CACHE | Tools Used: C++, gem5

Implementation of LRU insertion Policy, Bi-modal Insertion policy,Dynamic Insertion Policy, BRRIP and DRRIP in gem5.

POLARIS, PREVENTION OF CROSS SITE SCRIPTING ATTACKS

Tools Used: Python, PHP
Developed a tool Polaris, which sanitizes user input on behalf of the developer to prevent XSS attacks which given a PHP file, returns a modified version robust to XSS attacks.