# Shibani Singh

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LinkedIn | Github

#### **SUMMARY**

Cloud Solutions Engineer at Intel Corporation with a <u>Master's thesis</u> 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++.

#### **FDUCATION**

#### **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

Research work on IaaS & Benchmarking of Machine Learning and Data Analytics libraries on Cloudera Distribution of Hadoop and Apache Spark for Intel hardware.

#### **INTEL CORPORATION** | SOFTWARE ENGINEER INTERN

May - August 2016 | Oregon, United States

Benchmarking of Distributed Deep Learning Libraries, along with integration of Machine Learning models from one framework to another using Scala and Python

#### **QATAR FUEL (WOQOD)** | TRAINEE, I.T. DEPARTMENT

June - July 2014 | Doha, Qatar

Trained in Application and Database Management. Tools Used: Win DMS, Oracle ERP, Fuel Facs, and Adobe - Photoshop, Illustrator and Dreamweaver

# INDIAN INSTITUTE OF TECHNOLOGY | SOFTWARE DEVELOPMENT INTERN

January 2014 - May 2014 | Mumbai, India

I.I.T. Bombay implemented a Blended MOOC Framework. My Work was to understand & extend the open source edX framework to accommodate requirements of blended MOOC. Tools Used: Python, Django, JavaScript, XML, mongoDB, MySQL

### **PUBLICATIONS**

2017 Conference Paper - SPIE Journal

2017 Poster, Arizona Alzheimer's Consortium Deep Learning

2017 Poster, Arizona Alzheimer's Consortium Machine Learning systems

## **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.

#### FACE RECOGNITION SYSTEM | TOOLS USED: MATLAB, TOSCA

Development of a Face Recognition system using TOSCA library

## 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.