# Shibani Singh

### shibani.singh@asu.edu | 480.278.6065

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, IWMOOCS 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

#### UNDERGRADUATE

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

Computational Conformal Geometry

## 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

Working with customers on planning and designing Machine Learning solutions for distributed systems that best fit their requirements.

### **INTEL CORPORATION** | Software Engineer Intern

May - August 2016 | Oregon, United States

Benchmarked Deep Learning libraries on distributed systems for the MNIST dataset, and contributed to the spark toolkit on the Trusted Analytics Platform <u>TAP</u> spark-tk, a spark based toolkit for developing machine learning based analytics solutions for distributed platforms.

### **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/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.