

# Shibani Singh

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LinkedIn | Github

## SUMMARY

Cloud Solutions Engineer @ Intel Corporation, with [MS thesis work](#) 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 am a Software Engineer in the Data Center Group where my responsibilities include SW/HW specifications, design, development and deployment of scalable and optimized for IA - ML/DL use cases for Data Centric customers (H2O.ai, Splunk and others).

### 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 data 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.

### 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

- 2019 [Splunk .conf](#) - High performance Data Analytics with Splunk on Intel
- 2018 [Spark AI 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.