

## EDUCATION

### ARIZONA STATE UNIVERSITY, TEMPE AZ | MS - Software Engineering

GPA – 3.67 / 4.0 | May '18

- *Adv. Data Structures & Algorithms, Data Visualization, Data Mining, Programming Paradigms, Computer Architecture*

### SYMBIOSIS INTERNATIONAL UNIVERSITY, INDIA | BTech - Computer Science

Aug '10 – May '14

- *Algorithm Design & Analysis, Data Structures, Cloud Computing, Networking, Operating Systems, Computer Graphics*

## TECHNICAL SKILLS

- **JAVA/J2EE:** Spring, Hibernate, Struts, Swing, Maven, Ant, JSP, EJB
- **MOBILE:** Android Studio
- **BIG DATA:** NoSQL, MongoDB, Hadoop, Oracle
- **PYTHON:** NumPy, SciPy, Matplotlib, Pandas, Scikit Learn, Seaborn
- **VERSION CONTROL:** GIT, CVS, SVN, GitHub, BitBucket
- **SERVERS:** Apache HTTP, JBoss, WebSphere, Express
- **OPERATING SYSTEMS:** Windows, Mac OS, Linux (Ubuntu), UNIX
- **CMS:** WordPress, Joomla, Magento, Prestashop
- **PARALLEL COMPUTING:** CUDA C/C++, OpenCV, WebGL, JPPF
- **BUSINESS INTELLIGENCE:** Tableau, D3.JS, R
- **JAVASCRIPT:** MEAN, AngularJS, Node.js, AJAX, JQuery, Three.js, D3.js, Embedded JavaScript EJS, Express
- **WEB DESIGN:** HTML5, CSS3, Bootstrap, PHP, XML, XSLT, JSON, Photoshop, Illustrator, BrowserStack
- **TOOLS:** ServiceNow, MATLAB, SQL Developer, Eclipse, RAD, NetBeans, IDEA, Office Suite, Visual Studio, Slack
- **SOFTWARE DEVELOPMENT PROCESS:** Agile, SDLC, Software Design, Requirements, Documentation, Testing, Prototyping, DevOps, Debugging, ITIL, ITSM
- **OTHERS:** Problem-Solving, Attention to Detail

## WORK EXPERIENCE

### ARIZONA STATE UNIVERSITY | Graduate Research Assistant

Tempe, AZ | May '17 – Present

- *Develop a Synthetic Population Generator Software (PopGen) for large-scale Travel Demands Modelling using Python*
- *Achieve performance enhancements and migrate developed software to a cloud infrastructure using AWS*
- *Perform Data Analytics and Data Visualization on high-volume geo-coded Travel Data to find patterns and correlations*

### ARIZONA STATE UNIVERSITY | Student Software Developer

Tempe, AZ | Feb '17 – Aug '17

- *Developed a Thermal Comfort Model by computing Mean Radiant Temperature & Sky View Factor for Street View Images*
- *Retrieved, Processed and Classified Street View Image Sets using Parallel Computing, Image Processing & Machine Learning*
- *JavaScript, Node.js, Python, WebGL, Git, Geographic Information System (GIS), Sky View Factor (SVF), Mean Radiant Temperature (MRT), Keyhole Markup Language (KML), FORTRAN, ArcGIS, Google Earth, Street-View & Maps API*

### TATA CONSULTANCY SERVICES LTD. | Software Engineer

Mumbai, India | Aug '14 – Jul '16

- *Worked in Agile to develop a MVC-based J2EE Applications. Performed Enhancements, Defect Fixing, Root Cause Analysis*
- *Reduced Manual Effort by 99% by developing the Google Chrome Extension - SnowMAN, saving \$300,000+ annually*
- *J2EE, Spring, Hibernate, Struts, MVC, UNIX, JSP, JavaScript, Ant, Nexus Build, Jenkins, Oracle, Maven, SVN, Tomcat, Websphere Application Server, MySQL, DB2, WebServices, SOAP, REST, PowerCenter, BMC Control-M & ServiceNow*

### NVIDIA CORP. | Software Engineering Intern

Pune, India | Jan '14 – Apr '14

- *Analysed problems with No-Reference based Image Quality Assessment using Computer Vision and Image Processing*
- *Trained, Tested and Optimized Image Quality Assessment models using Machine Learning and Parallel Programming*
- *MATLAB, C, C++, CUDA C, Visual C++, C#, ASP.NET, Windows Forms, Image Processing & Signal Processing*

### TATA CONSULTANCY SERVICES LTD. | Software Engineering Intern

Mumbai, India | Jan '13 – Jun '13

- *Developed a multi-threaded Windows Application to Automate Secure Authentication to Remote Server & File Retrieval*
- *Java, Java SWT, VBScript, Network Programming using SMB, JCIFS & New Technology LAN Manager(NTLM)*

## VOLUNTEER EXPERIENCE

### MARICOPA ASSOCIATION OF GOVERNMENTS | Software Engineer

Phoenix, AZ | Jan '18 – Present

- *Improve Memory/Runtime in MAG ABM Travel Forecasting Tool by using Java Parallel Processing Framework (JPPF)*
- *Parallelize computationally intensive tasks and distribute them across several Nodes on a Grid*

## ACADEMIC PROJECTS

- **SCORE 2018 Project - Social Network Analysis & Data Visualization for Slack:** MEAN Stack , WebGL , D3.js, slackarchive.io
- **Global Commodity Trade Data Visualization:** Javascript, NodeJS, Ruby, WebGL, HTML5, CSS3, Angular JS, D3, R, Tableau
- **MovieHill – Semantic Web-based Linked Data project sourced from multiple movie datasets online:** RDF, HTTP, JavaScript
- **Design & Construction of a Programming Language Compiler & Virtual Machine:** ANTLR, PROLOG, Java, Python
- **Visualizing System-on-a-Chip (SoC) CPU Architecture:** JGraphs, MIPS Instruction Set Architecture, Pipelining, Control Flow
- **Android Apps – allSocial (Multiple Social Accounts Management), EmojiText (Text-2-Emoji Converter):** Android Studio
- **Websites – FreeMapl.com, PenPine.com, PinnacleCareAZ.com:** Content Management Systems, WordPress, Drupal

## SIDE PROJECTS

### GharBaitho.com – Online Grocery Store | End-to-End Developer and Founder

Jul '15 – Jun '16

- *Created, Managed and Sustained an Internet Grocery Company single-handedly, named GharBaitho (or "Stay-Home")*
- *Developed process tools, Maintained Website, Handled Clients, Business Partners, Marketing & Operations Resources*
- *PHP, HTML, CSS, JavaScript, Web Hosting, Online Advertising, Search Engine Optimization, Adobe Creative Suite*