Aishwarya Pratap Singh

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EDUCATION

- **Master of Computer Science** **May, 2018**
  Ira A. Fulton Schools of Engineering, ***Arizona State University***, Tempe, AZ **3.44 GPA**
  Course Work: Fundamentals of Algorithms, Multimedia and Web Databases and Software Design
- **Bachelor of Technology – Software Engineering** **May, 2013**
  SRM School of Engineering, ***SRM University***, Chennai, India **8.64 CGPA**

TECHNICAL EXPERTISE

- **Programming Languages:** Objective-C, Swift, JAVA, C#, JavaScript, Python, HTML, CSS.
- **Software:** XCode, IntelliJ IDEA, pyCharm, webStorm, MonoDevelop, Unity 3D, Blender, MATLAB.
- **Platform and Frameworks**: XMPP framework, JSON, Augmented Reality, Vuforia SDK, iOS Charts, GIT, SVN.

ACADEMIC PROJECTS

Geospatial Data Analysis Using GeoSpark **Spring 2017**

- Implemented a multimode master slave setup using Hadoop and Apache Spark.
- Performed geospatial analysis queries like indexing, classification of geospatial points of interests using GeoSpark and Scala.
- Implemented fragmentation of data and designed efficient query processor using Python.

Visualization of Cricket Data to Seek Latent Performance Metrics **Spring 2017**

- Formulate possible latent causes affecting the outcome of a game and the performance of a player based on the data.
- Design visualizations that most efficiently communicate the data to a user and at the same time facilitates discovery of hidden patterns in the statistics using d3js.

Feature Extraction and Classification of Multimedia Data **Fall 2016**

- Performed color histogram, SIFT and motion vector feature extraction from a set of given multimedia data using MATLAB.
- Implemented distance calculation between the set of data based on various distance metrics like Just Noticeable Distance, Euclidian distance, Chi-Square distance etc using Java.
- Performed Principle Component Analysis and K-Means on the data to extract the latent dimensions of the data and categorized and classified the data using K- Nearest Neighbor and Locality Sensitive Hashing in Java and MATLAB.

EXPERIENCE

Teaching Assistant, Arizona State University, Tempe, AZ **Sep 2016 – Present**

- Mentor, non-computer science background students, as a teaching assistant to address technical difficulties and convey computer science concepts.
- Discuss programming and design practices with students, enabling them to write a more structured and modular code.

Software Engineer, iOS Developer, Payoda Technologies, Coimbatore, India **Jul 2013 – Jun 2016**

- Led a team of 5 developers to create a secure communication application with role based access and HIPAA compliance.
- Developed applications utilizing web services using XML, JSON using AFNetworking and Alamofire.
- Designed and documented various reusable components resulting in up to 20% reduction in the development effort of applications by the team.
- Engineered proof of concepts in the space of mobile retail applications, using virtual and augmented reality, to explore options for customer applications.
- Used XCTests and Instruments to deliver quality releases with no performance bottlenecks.

AWARDS AND ACHIEVEMENTS

- Emerging Tech Guru of the Year – Payoda Tech **2015**
- Most Valuable Player of the Quarter – Payoda Tech **Sep 2015**
- Innovation Award – Payoda Tech **Dec 2013**
- Founder's Scholarship for all round performance. – SRM university **2010-2013**

ORGANIZATIONS

- Research Assistant – SRM Research Institute
- Campus Manager – Star Network, Channel V Indian Fest.
- Events Manager – Aarush, SRM University Technical Fest