Sandeep Zechariah George K

Personal Data

Address:	38 Alexandra Road, London – N8 0PP
Phone:	+44 747 7415 957
email:	sandeepzgk@gmail.com
Portfolio:	www.lazylabz.net

Work Experience

Oct 2012 – Jul 2014

Researcher, Adobe Research Labs, Adobe Systems, Bangalore, India

About the team: Adobe Research is a premier organisation engaged in industrial research since the very foundation of Adobe Systems, It has been crucial to create various technologies that has been critical to the success of many products that has been made the company.

Roles and Responsibilities: Developed strategic patented technologies, (a few of these are listed in the sections below) for Adobe Digital Marketing Cloud, and created visualisations demonstrating the technologies. My work involving creating strategic visualisations showcasing Adobe Lab's Technologies have been presented at various events including Adobe Digital Marketing Summit 2013 and Adobe Max 2013. A version of this has been adapted for use in Adobe Social, a social media marketing platform.

Key Technologies: R, D3, Python, JavaScript, Apache Storm, Redis, HBase.

Apr 2011 – Oct 2012

Product Solution Developer, Adobe@Adobe, Adobe Systems, Bangalore, India & Ottawa, Canada

About the team: Adobe@Adobe is a young team of a small group of people spread across different offices in key Adobe locations across the world. The charter of the team is to create innovative solutions using Adobe's own technologies to further the boundaries of its portfolio.

Roles and Responsibilities: Created strategic technologies utilising Adobe tools to push the boundaries of the technology and to create innovative products for the market. UNICOM project, where I developed the voice, IM and other features, received interest from DISA, USA.

Key Technologies: Flash, HTML, CSS, JavaScript, C#.

Sep 2007 – Apr 2011

Web Engineer, Web Technology Group, Adobe Systems, Bangalore, India

About the team: The team has an established presence within Adobe, and is a key player in creating and maintaining Adobe's core digital asset: *adobe.com* and leverage the platform for Adobe's cloud strategy which now encompasses three components, *Creative Cloud, Document Cloud and the Digital Marketing Cloud*

Roles and Responsibilities: Worked on Adobe's digital presence, on Adobe's Online Store transacting over a Billion US Dollars. Along with creating platform technologies that have been used in Acrobat product families. My work has been credited and acknowledged in both Acrobat *X* onwards.

Key Technologies: HTML, CSS, JavaScript, ColdFusion, Flex, Flash.

Highlight Project

I have worked on many multi-disciplinary projects involving various programming, creative, architectural skills. Here is a project where I would like to highlight one of my latest projects "Real-time Visualization and Targeting of Online Visitors".

This project was to create a real-time dashboard for marketers to visualize on-site traffic patterns and target selected user segments with custom offers. Markets have the ability to create appropriate visitor segment for targeting based on a multitude of attributes.

The entire engineering, creative, and architecture of implementing this project was done as a showcase of the algorithm by me. The architecture involves creating a data stream from the webpages to a real-time processing engine. The data stream was processed and analysed using Apache Storm using bolts and sprouts to implement a streamlined processor for large data. This data was pumped into two databases, one for long-term storage with Apache HBase and the other for real-time retrieval using Redis. The dashboard server was created using NodeJS interfacing with the Redis Database. The data gathered from Redis by NodeJS was pumped to dashboards of different marketers using web sockets. This real-time data was shown in a visually appealing method using D3 and JavaScript on a browser.

Details are published at ACM SIGIR 2014: *http://dl.acm.org/citation.cfm?id=2611180.*

Education

2015	Master of Science in Human Computer Interaction with Ergonomics, **University College London**, London MSc with Distinction (72.5%)
2007	Bachelor of Technology Degree in Computer Science and Engineering, **Cochin University of Science and Technology**, India First Class Degree (70.8%)

Patents and Publications

USPTO No. 14/280393:	Detecting Behavioral Anomalies and Patterns of Individuals and to Normalize the Overall Results.
USPTO No. 14/031256:	Predicting Spread of Content Across Social Networks.
USPTO No. 13/916775:	Effective Method of Creating Seed Set for Viral Marketing.
Pending:	An Intuitive color selection tool for the real world.
Pending:	Performance monitoring system for RIA.
Pending:	Automatic Tracking injection for Web Applications.

"Real-time visualization and targeting of online visitors." Proceedings of the 37th international ACM SIGIR conference on Research & development in information retrieval.

Industry Honours

Jul 2007	First prize in *Adobe Developer Olympiad* and received accolades in the catagories of 'Innovative UI and Experience models' & 'Mash Up Applications'.

Conferences

UX India 2013	Bangalore, India	Speaker:"Usability in Data Visualization"
Adobe Tech Summit 2013	San Jose, CA	Speaker:"Adobe's Predictive Technologies"
Adobe Tech Summit 2011	San Jose, CA	Speaker:"Introduction to Rapid Prototyping"
Adobe MAX 2011	Los Angeles, CA	Speaker:"Adobe @ Adobe"

Certified Qualifications

2013	Natural Language Processing	Columbia University
	Social Network Analysis	University of Michigan
	Gamification	University of Pennsylvania
2012	Certified Usability Analyst	Human Factors International