NIKHIL SINGH SHEKHAWAT

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EDUCATION

INSTITUTION	DEGREE	GPA
University of Central Florida(2014-2015)	Master of Science(M.S.) in Computer Science	4.0/4.0
IIIT-Delhi (2008-2012)	Bachelor of Technology(BTech) in Computer Science	7.31/10

EXPERIENCE

Software Engineer Intern, Royal Bank of Canada Innovation Lab; Orlando, FL   June 2015 - Present

- Developed and deployed the entire front end of Mobile Enrollment for RBC.
- Implemented the server communication and UI structure for the RBC wallet, which enables secure payments through mobile devices with the "Tap and Touch" functionality. The App is to be displayed at Google IO 2015 as a fingerprint authentication use case.

Research Assistant (GRA), University of Central Florida; Orlando, FL   August 2014 – Present

- Developing the pay with points widget for IOS RBC Wallet, for in-App payments.
- Worked on hardware level security of secure key storage on android devices supporting TrustZone.
- Developed a CUDA library for simulating memristor crossbars on massively parallel GPGPUs while working as a developer in the Quantitative Modeling, Analysis and Synthesis Laboratory (QMAS).
- Presented a parallel memristor simulator on GPUs at GTC 2015 (GPU Technology Conference by Nvidia).

Assistant Software Engineer, EyeBridge; New Delhi, India   August 2012 – June 2014

- Built the client end for a domain name selling website "BrandsnDomains.com" and a social networking site for gamers "pro-gs.com"
- Each project was close to 10,000 LOC with files written in HTML, CSS and JavaScript

Software Engineer Intern, Samsung; New Delhi, India   May 2011 – July 2011

- The only programmer to build 6 Applications for the Samsung Smart TV in the span of two months.
- Each application was around 2,000 LOC and written in HTML, CSS and JavaScript using the Samsung SDK

Software Engineer Intern, Composite; New Delhi, India   Nov 2010 – Jan 2011

- Built a search engine that queried protein structures and displayed a graph for every obtainable protein match.
- Used Apache Lucene for indexing and querying, and Cytoscape for displaying proteins as nodes in a graph

TECHNICAL SKILLS

Programming Languages	Java, C/C++, JavaScript, ActionScript 3.0
Software, Tools, Technologies	CUDA, Git, HTML+CSS, AJAX, AngularJS , jQuery, Bootstrap, openCL, openACC
Courses	Analysis and Design of Advanced Computer Algorithms, Parallel Algorithms, Multicore programming, Computer Architecture, Image Analysis, Pattern Recognition, TOC, Mobile Computing, Software Engineering, Network Optimization

RESEARCH WORK

1. Nikhil Singh Shekhawat and Sumit K. Jha , "AVEGA: The memristor crossbar simulator", presented at: GTC-2015
2. Nikhil Singh Shekhawat and Sumit K. Jha , "Extending parallel programming education beyond the von Neumann architecture", presented at EduPar-2015

PROJECTS

Name	Description
RBC Wallet	The everyday banking and payments application that runs in these two modes respectively. The application opens up with the cards that have previously been added to the wallet, which when tapped against an NFC terminal can make a payment. The banking mode enables the user to clear bills, check accounts, add cards to the wallet, view history of transactions made and other server side activities.
AVEGA	A memristor crossbar simulator using GPGPUs for the verification and validation of designs over a large parameter space.
Tower Stack Game	An interactive tower building game which was deployed on flash capable device using Adobe AIR.
Video Authenticity	A Software to check if the frames in a video have been tampered with. Won the Best Poster Award at the Research Showcase in Jan 2011.
Android Chat and File Sharing	Originated from a simple idea of playing cricket, which evolved into a full blown chat and file sharing application on android devices. Won the Best Poster Award at the Research Showcase in Dec 2011.

AWARDS

Name	Description
Deans Fellowship	For students displaying exceptional academic and research achievements in the first year of Graduate School.
In-house Research Grant	Proposal for in house research work to pursue innovative ideas, granted by the Office of Research and Commercialization.