

## Education

University of Central Florida (UCF)

Master of Science, Computer Science • GPA: 4.0/4.0

ORLANDO, FL, USA

Aug, 2014 – present

Indraprastha Institute of Technology, Delhi (IIIT Delhi)

Bachelor of Technology, Computer Science Engineering • GPA: 7.37/10

NEW DELHI, INDIA

Sep, 2008 – May, 2012

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## Skills

**Programming Languages:** Java, C/C++, JavaScript, ActionScript 3.0

**Tools:** CUDA, Git, HTML+CSS, AJAX, AngularJS, jQuery, Bootstrap, openCL, openACC 3.0, Ethereum

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## Employment

**Software Engineer Intern, Royal Bank of Canada Innovation Lab**

May, 2015 - Present

- Added fingerprint authentication, for payments in RBC Android Wallet, showcased at Google IO 2015.
- Developed the responsive UI for the mobile enrollment, used in the IOS and Android Wallet.
- Worked on secure storage for card applet in Nvidia TLK Trustzone.
- Working on implementing RBC rewards program on Ethereum and Manifold blockchains.

**Research Assistant, QMAS Lab UCF**

Sep, 2014 - Jun, 2015

- Developed a CUDA library for simulating memristor crossbars on massively parallel GPGPUs. Presented the work done here at GTC 2015 (GPU Technology Conference by Nvidia).

**Assistant Software Engineer, EyeBridge**

Aug, 2012 - Jun, 2014

- Built the front end for a domain name selling website "BrandsnDomains.com" and a social networking site for gamers "pro-gs.com". These web projects were written in HTML, CSS and JavaScript.

**Software Engineer Intern, Samsung R&D**

May, 2011 - July, 2011

- The only programmer to build 6 Applications for the Samsung Smart TV over a short 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 Software Solutions**

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.
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## Research

**The memristor crossbar simulator**

Nikhil Singh Shekhawat and Dr. Sumit Kumar Jha, Professor, UCF

Aug 2014 - Jan 2015

"AVEGA: The memristor crossbar simulator", poster presented at: GTC-2015

**Extending parallel programming education beyond the von Neumann architecture**

Nikhil Singh Shekhawat and Dr. Sumit Kumar Jha, Professor, UCF

Dec 2014 - April 2015

A description language was added to AVEGA for it to be able to simulate memristor crossbars based on the user input, poster presented at EduPar-2015

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## Projects

**RBC Wallet**

May, 2015 - Jun, 2015

The everyday banking and payments application that provides two functions. Firstly 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. Secondly the wallet enables the user to clear bills, check accounts, add cards to the wallet, view history of transactions made and other account details.

**RBC Mobile Enrollment**

June, 2015 - Nov, 2015

A responsive web-page that enables RBC mobile users to enrol themselves into using the mobile application. The client enters valid credentials, verifies their identity using phone or email options through which they receive a verification code, after entering it, they are all set for mobile banking.

**AVEGA**

Aug, 2014 - Jan, 2015

A memristor crossbar simulator using GPGPUs for the verification and validation of designs over a large parameter space, and predicting the best model by using the RMS error.

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## Coursework

Analysis and Design of Advanced Computer Algorithms, Parallel Architecture and Algorithms, Multicore Programming, Computer Architecture, Image Analysis, Pattern Recognition, Theory of Computation, Mobile Computing, Software Engineering, Network Optimization