

# Sawaiz Syed

Last update on February 8, 2014

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## Experience

### Georgia State University Department of Physics

ATLANTA, GEORGIA

#### Lead Hardware Developer

January 2014 – present

Design a low power embedded system mesh to communicate with nodes and provide radiation readings for analysis. CAD layout and electronic design of high voltage, and radio communication systems. Design for reducing cost of final product for production. Software development using C, C++. Create documentation for future users and development.

### Fry's Electronics

ALPHARETTA, GEORGIA

#### Sales Associate

December 2013 – February 2014

Assist customers with selection of electronic and computer component and tools, consumer and enterprise grade networking equipment based on their needs.

### Georgia State University

ATLANTA, GEORGIA

#### Teaching Assistant for PHYS-1112K

February 2013 – May 2013

Create challenge questions to check students comprehension of physics concepts. Grading labs, tests and other assignments in a timely manner.

### Roswell Telemetry

ROSWELL, GEORGIA

#### Embedded Systems Programmer & Electrical Engineer

February 2012 – September 2012

Port Atmel .Net Micorframework for over the air reprogramming. Construct and maintain prototyping equipment including an aluminum forge and 3D printer. QC and Debug failed hardware. Research materials for future improvement of products. Produce and test field electronics.

### Kroger Company

ALPHARETTA, GEORGIA

#### Courtesy Clerk

June 2010 – January 2011

Manage front-end supplies and replenish as needed. Maintain clean and safe environment as required by standards.

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## Education

### Georgia State University

ATLANTA, GEORGIA

#### Bachelor of Science, Physics & Computer Science

Expected Graduation 2015

### Alpharetta High School

ALPHARETTA, GEORGIA

#### Dual Diploma: College Prep & Engineering

Spring 2011

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## Skills

**Technical expertise:** Electronics Design and prototyping, Circuit Design, Soldering, PCB Layout ([Eagle CAD](#)), Embedded Systems ([Atmel](#), [Arduino](#)), Workstation, server and network management and construction, Robotics, [CNC](#) milling/cutting/printing, Remote Control and autonomous flight, Molding and Casting, Photography and filmography.

**Programming:** C, C++, Java, Python, XML, SQL, Android SDK, [G-Code](#), [L<sup>A</sup>T<sub>E</sub>X](#), [POV-Ray](#), FTP, GIT, SVN.

**Software Packages:** [Autodesk Suite](#), [Adobe Suite](#), [Eagle](#), [Blender](#), [Eclipse](#), [Intellij IDEA](#), [Audacity](#), [SketchUp](#), [Solidworks](#) MS Office Suite, [CAM](#), Linux/Unix.

**Natural languages:** English, Urdu (*mother tongue*), French (*elementary proficiency*)

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## Achievements

[CITI Responsible Conduct of Research](#) certification, AP Scholar with Distinction (6 Exams), 1<sup>st</sup> place [Georgia Technology Fair](#) in Robotics with [Centrics IT](#) scholarship (2010).

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## Organizations

Society of Physics Students (Treasurer), Science Olympiad (Lead Engineer), National Science Honor Society, Science Olympiad Judging – 56 Hours, Recycling Club – 60 Hours, SPS Tutoring – 8 Hours

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## Relevant Experiences

Designing and building wireless 40W laser cutter (70% complete). Have built, tested, and placed into production three 3D printers ([Mendel Max](#), [Mendel](#), [Kossel Mini](#)). Hardware development for [Rep-Rap](#) project. Setup and manage home networking and media, data, and backup servers hosted on domain.