

# RIZWAAN ABDUL

COMPUTER PROGRAMMER, DIGITAL  
FABRICATOR

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## Profile

I am very passionate about the world I live in and in improving it using the skills I know best.

## Skills

### Digital Design

Using open source and closed source tools to create both 3d and 2d models that can be either digitally fabricated or become a user interface for a software.

### Database Design

Efficient database design for a quick and effective queries.

### Project Direction

Proven ability to lead and manage a wide variety of design and development projects in team and independent situations.

### Digital Fabrication

Proven ability to use available machines to create a reproduceable result using automated control.

## Technical

HTML	MySQL	macOS
CSS	PHP	Windows
JavaScript	V - Carve	Linux
Video Editing	Shopbot	Laser Engraver
Coral Draw	Fusion 360	Arduino

## Experience

### Scopes DF

#### Fabship Internship

June, 2018

I was, in a team of 3, tasked to make a pinball machine using only means of digital fabrication using tools such as the Shopbot, Carvey, Laser Cutter, Vinyl Cutter, etc.

### Grass in the Road

#### Private Programmer

May, 2018 – August, 2018

I was independently hired to create and implement an algorithm that produced a personalized literary based on a simple interest survey.

## *Projects*

### **Hunter Museum of Art** Digital Fabrication

August, 2017 - October, 2017

An art piece that was digitally fabricated with embedded LEDs in order to provide a more interactive yet reproduceable art experience.

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### **Signal Centers** Digital Fabrication

March, 2018 - May, 2018

An arcade machine for the physically disabled which can be controlled using only one foot. A special foot joystick was digitally designed and fabricated to allow for continuous 360 degree input.

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### **Grass in the Road** Software Innovations

August, 2018

A database administration software for Grass in the Road to automatically upload an excel spreadsheet to a MySQL database.

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### **Kenco IoT** Software Innovations/Digital Fabrication

August, 2018 – October, 2018

A warehouse stock management software which receives sensor values and displays it in an intuitive design. A PCB based on Arduino Open Boards which includes slots for multiple USB based sensors and one radio antenna for communicating sensor values.

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### **Creative Discovery Museum** Software Innovations/Digital Fabrication

October, 2018 - February, 2019

An electronic battleship type game in which all the pieces were cut on the Shopbot and Laser Engraver for the Creative Discovery Museum. A custom PCB was also designed to lower the cost if needed to reproduce.

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### **Challenger Center** Digital Fabrication

January, 2019 - March, 2019

A race track was digitally designed and fabricated for students in grades K-5 to analyze the difference mass causes in the average velocity of the object at the Challenger Center.

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### **BÜK by Rizwaan Company** Software Innovations

November, 2016 - Current

An educational program that allows teachers and administrators to create a list of possible classes for each time of day, then allow the students to choose the classes they prefer.

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## *Leadership*

I was selected to lead the educational curriculum for tenth grade students in relation to both programming (HTML, CSS, and JavaScript) and academic application of such

programming (a self grading quiz/instruction platform). I also lead a competition between STEM School students and employees of UNUM in regards to computer science.

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### *Extracurricular Recognition*

I have been in many local Chattanooga Newspapers, magazines, and online articles representing STEM School Chattanooga and Hamilton County's Department of Education as a whole. Additionally, Hamilton County Department of Education have recorded and published an interview of my achievements.

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### *Additional Notes*

I have received scholarships to attend Gig City Elixir, which is an annual developer conference in Chattanooga.

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I placed first in MIST (Muslim Interscholastic Tournament) Nashville for Extemporaneous Speech and third in Jeopardy.

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I hosted STEM School's Surge presentations, which is an event where seniors present their business ventures to potential investors.

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I hosted Chattanooga Tamil Sangam's Pongal function, which is an annual celebration in Tamil Culture correlated to the month of harvest.

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I gave a presentation regarding the economical difference in support of Israel and Palestine versus the population support along with the social situation in the middle east.

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### *Education*

STEM School Chattanooga - Chattanooga, Tennessee  
**4.0 GPA**

Chattanooga State Community College - Chattanooga, Tennessee  
Calculus I, Calculus II, Linear Algebra, Computer Science I — **4.0 GPA**

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For reference images or links please contact me above.