# Omar Raza

Developer - Communicator - Doer

### Education

2015–2019 **BS–Computer Science, Mathematics**, *Purdue University*, West Lafayette, IN.

Specialization: Database and Information Systems, Machine Intelligence

Pursuing Entrepreneurship Certificate

Awards: Recipient of the Purdue University Presidential Merit Scholarship

**Relevant Course Work**, Systems Programming in C and SQL, Data Structures and Algorithms in C++, Computer Architecture in C and Assembly, Object Oriented Programming in Java, Introduction to Entrepreneurship.

## Technical Expertise

#### **Programming / Scripting Languages.**

Proficient: C/C++, Java, C#, Objective-C, SQL, ASP.NET, Swift, LATEX, Assembly Familiar: Python, Ruby/Ruby on Rails, HTML/Jade, CSS/SASS, JS Framework

#### Programs/Systems/Frameworks.

Proficient: .NET Framework, Cocoa/Objective-C Framework, Linux /Unix Framework, SOC/ARM RISC Architecture

Familiar: TCP/IP Protocols, Mac OS Framework, Chrome Apps, AWS, OPENGlut

## Work Experience

Present Undergraduate Researcher, Applied Optics Laboratory, West Lafayette, IN.

Developing an iOS application and updating legacy Android applications along with Algorithm development for picture processing using external hardware

Fall 2016 **Software Engineer**, *IronGolfer*, West Lafayette, IN.

Development of Back-end/Serverside Framework and assisted with design of Front-end interface for a family of startups

Summer 2015 **Research Internship**, *Angelhack*, San Francisco, CA.

Assisted in the development, revision, and execution, of the main submission system used for Angelhack hackathons.

## **Projects**

**Convex Hull Maker**, *C++*, https://github.com/osterhagen/ConvexHulls.

Developed a GUI using OpenGLUT that takes an array of points and returns the Convex Hull. Used Jarvis Hull and Graham Scan algorithms to find the outermost points, and quicksort to assist in the scanning.

**Email Server**, *Java*, github.com/osterhagen/Email\_Server.

Created a command line style email server that could store password protected emails using different internal storage mechanisms that had a level of security while still being SQL friendly.

## Volunteer Experience

Present **Treasurer**, BoilerMake Executive Board (Purdue's Collegiate Hackathon).

Present Sponsorship/Partnership Committee Member, BoilerMake Executive Board.

2015-2016 **Issues and Facilities Committee member**, *Purdue RHA Legislative Branch*.

Awards: Appreciation of Service and Contribution - Executive Board

2015-2016 **Assembly-member**, Purdue RHA (Residence Hall Association) Legislative Branch.

2013-2015 Patient Service Ambassador / Shift Leader, Kaiser Permanente Hospital.