Samad Ahmed

Thinker. Pragmatist. Visionary.

samadahmed2019@gmail.com

Summary

I am currently en-route to obtaining my Bachelor of Science (B.S.) degree in Mathematics from the University of Houston. My professional ambitions are quite diverse. Although my interests tend to circumnavigate around the growing world of deep learning, computer vision and artifical intelligence, I also tend to be absorbed by investment opportunities, entrepreneurial strategies, and the sensitivities of the stock exchange.

Until recently, I have worked as a machinist for the University of Houston, focusing on a plethora of projects in conjunction with the mechanical engineering department. Prior to that, I have worked as a graphical designer and was able to grasp, on average, seven new clients per week from the greater-Houston area which allowed for an additional trigger in sales.

My colleagues and peers recognize me as an ambitious character with a technical tool set, as I am able to successfully utilize my in-depth knowledge of mathematics, programming, and logic into developing creative and distinct solutions in many areas.

Feel free to follow my blog at: samadahmedblog.wordpress.com

Some words to live by:

"We must all suffer from one of two pains: the pain of discipline or the pain of regret. The difference is discipline weighs ounces while regret weighs tons." - Jim Rohn

Education

University of Houston

Bachelor of Science (B.S.) Mathematics, Computational and Applied Mathematics, 2015 - 2018 Activities and Societies: Math Alliance, Pi Mu Epsilon

Free Code Camp

Full Stack Web Development Certification, Computer Software Engineering, 2016 - 2017

Courses

Bachelor of Science (B.S.) Mathematics, Computational and Applied Mathematics

University of Houston Linear Algebra Intermediate Analysis Advanced Multivariable Calculus Abstract Algebra Object Oriented Programming Principles with Java

Full Stack Web Development Certification, Computer Software Engineering

Free Code Camp
Introduction to jQuery
Responsive Design with Bootstrap
HTML5 and CSS3 Fundamentals
JSON APIs and AJAX
Algorithmic Scripting
Functional Programming with Javascript
Object Oriented Programming with Javascript

Independent Coursework

Programming Foundations with Python (via Udacity)

Introduction to Linux (via edX)

Algorithms I (via Coursera)

Approximation Algorithms I (via Coursera)

Experience

Undergraduate Teaching Assistant at University of Houston

May 2016 - Present (6 months)

- Facilitated learning and individualized instruction for students enrolled in Single Variable Calculus
- Guided students to think critically by categorizing concepts and asking probing questions
- Maximized effectiveness by providing feedback tailored to each student's thought process
- Awarded a stipend of \$2000

CNC Machinist at University of Houston

September 2015 - December 2015 (4 months)

- Responded to design demands via operation within CNC
- Controlled regulating machine factors such as speed, feed, angle-of-cut, and depth
- Fabricated tools and fixtures in conjunction with specific engineering needs
- Performed checking of levels of lubricating fluid

- Corrected defects as and when required

Graphical Designer at Maharani's Beauty Salon

June 2011 - August 2014 (3 years 3 months)

- Designed postcards, brochures, and flyers to attract clientèle from Sugar Land-Houston area
- Triggered additional sales by utilizing SpotOn customer loyalty service to provide access to deals
- Implemented time-driven strategies to induce an influx of customers around seasonal occasions

Skills & Expertise

Python

Linux

Java

Programming

Computer Science

Public Speaking

Data Analysis

LaTeX

Matlab

Bootstrap

Cascading Style Sheets (CSS)

HTML5

JavaScript

Projects

Method of Image Compression using Singular Value Decomposition

September 2016 to Present

Members:Samad Ahmed

- Performed compression by using SVD-based image compression scheme on various images
- Optimized block-size to minimize computation time and computer storage requirement
- Ensured quality of compression allowed for proper viewing in regards to the physiology of the eye
- Programmed using MATLAB

Tribute Page

September 2016 to Present

Members:Samad Ahmed

Project Link: http://codepen.io/sahmed007/full/ORymVr/Code Link: http://codepen.io/sahmed007/pen/ORymVr

- Tribute page that represents the life and history of Karl Weierstrass
- Built in partial-requirement for FCC's Full Stack Web Development Certification
- Technologies used in this project include HTML5, CSS3, and Bootstrap framework

Microcontroller-Integrated Rocket (MIR)

March 2015 to May 2015

Members:Samad Ahmed

- Developed custom-fuel allowing for approx. 400 feet altitude in coordination with FAA regulations
- Established a payload system in order to gather atmospheric data
- Reinforced weight-distribution of parts during construction to optimize rocket-recovery
- Programmed payload parts using Atmega30 micro-controller on the Arduino platform

Organizations

Math Alliance: The National Alliance for Doctoral Studies in the Mathematical Sciences

Member

June 2016 to Present

The Math Alliance is a NSF-funded community with the following goals:

- 1. To increase the number of doctoral degrees in the mathematical sciences among groups that have been traditionally underrepresented in those fields.
- 2. To improve placement of students from these groups in doctoral programs in disciplines that recruit undergraduate mathematics majors.
- To increase funded research collaborations among faculty members at the universities with mathematical sciences doctoral programs and faculty members at colleges and universities focused on undergraduate students.
- 4. To foster the growth of a community of mathematical scientists that promotes a diverse workforce.

Pi Mu Epsilon

August 2016 to Present

You are eligible to become a member of Pi Mu Epsilon if you are a candidate for an undergraduate degree at the University of Houston and meet ALL of the following three requirements:

- 1. You have completed at least the equivalent of two semesters of calculus and two additional courses in mathematics, at or above the calculus level, all of which lead to the fulfilment of the requirements for a major in the mathematical sciences.
- 2. Your overall GPA is 3.0 or higher.

3. Your GPA in just your math classes is 3.0 or higher.

Honors and Awards

Academic Excellence Scholarship

University of Houston

Awarded \$8000 for continuation in higher studies while maintaining a competitve academic profile.

Languages

English(Native or bilingual proficiency)Urdu(Native or bilingual proficiency)Hindi(Native or bilingual proficiency)

Punjabi (Elementary proficiency)
Spanish (Elementary proficiency)

Interests

algorithmic-design, ethical-hacking, applied mathematics, large data, strategic investing, emerging markets, quantitative finance

Samad Ahmed

Thinker. Pragmatist. Visionary.

samadahmed2019@gmail.com



Contact Samad on LinkedIn