AMBER AHMED

I have studied medicine, engineering and data science. I have worked in diverse set of industries. I believe that one way of finding efficient and long lasting solutions to existing problems is by harnessing the power of data. I have spearheaded data visulaization and automation projects that have been critical in identifying process mismatch, reducing engineering time and associated labor costs.

Currently searching for a position that allows me to build data-driven solutions by leveraging a combination of process engineering and data science to help create more robust chemical manufacturing processes.

🎓 EDUCATION

2020 | 2020

Programming for Data Science with R nanodegree
Online　　　　　　　　　　　　　　　　　　📍 Udacity

- Studied SQL for data analysis, programming with R , command line essentials and git bash
- R programming project can be accessed here[1]

2015 | 2010

B.S.E Chemical Engineering
Arizona State University　　　　　　　　　📍 Tempe, AZ

- GPA 3.43

2008 | 2005

M.B;B.S.
King Edward Medical University　　　　📍 Lahore, Pakistan

- Studied human anatomy, physiology and biochemistry. Passed first professional (part 1&2) in first division.

💻 RESEARCH EXPERIENCE

2011 | 2010

Undergraduate Researcher
📍 University of Arizona College of Medicine
Gallitano Lab

- Analyses of genetic data from schizophrenic patients using genomic association software PLINK, PBAT and FBAT.
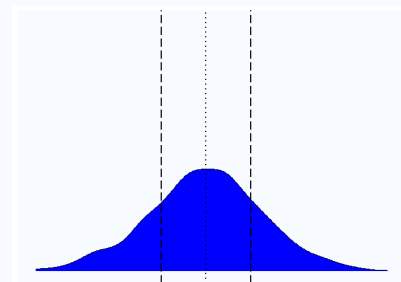- Publication[2]

📑 PUBLICATIONS

2016

EGR3 and ARC association to schizophrenia[3]
PLoS One

- Performed hypothesis testing for various population datasets which served as the basis of this publication by exhibiting a strong correlation between EGR 3 and schizophrenia risk.

View this CV online with links at _https://amberahmedcv.netlify.app/_

CONTACT

✉ amber.m.ahmed@gmail.com

🐦 Statsw_eng

🐙 github.com/AmberHabib

🔗 amberahmed.netlify.app/

in linkedin.com/in/amberahmed

LANGUAGE SKILLS
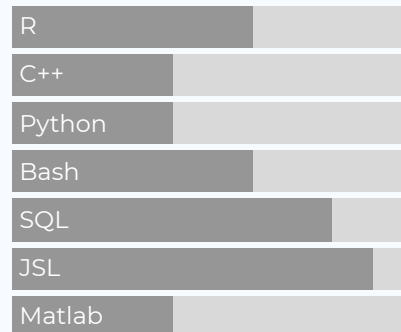
R
C++
Python
Bash
SQL
JSL
Matlab

💼 INDUSTRY EXPERIENCE

2018
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2017

Engineer II
Illumina Inc.   📍 San Diego, CA

- Led process inventory, and resource management as well as, planning and scheduling for proto part assembly during the critical design verification test phase for iSeq100 consumable cartridge. Served as a liaison between the product development and NPI teams.
- Constructed html dashboard for continuous reporting of proto process quality metrics (line yield, process yield, failure pareto etc.). Automated control charts for 40 critical parameters reported by 11 process and QC (quality control) tools with JSL and R scripts.
- Completed two week long offsite training for programming liquid handling robotic systems.

2017
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2016

Process Engineer
Intel Corporation   📍 Chandler, AZ

- Owned and lead the stability, performance, and improvement functions of highly advanced photolithography equipment which provides operational support to Intel's 10nm and 14nm chip manufacturing processes.
- Recognized for leading an effort to analyze and explain low parametric matching scores as a function of inherent variability in the equipment. Used IP database script and SQL database query for data extraction and JMP for data manipulation and analyses.
- Recognized for automating process control system daily report for module morning pass down saving more than 100 hr./year of indirect labor cost.

2015
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2015

Research and Development Intern
Henkel Consumer goods   📍 Scottsdale, AZ

- Design of experiment (DOE) using mixture design for improving performance of a laundry detergent formulation.

2012
|
2012

Process Engineering Intern
ch2m hill   📍 Tempe, AZ

- Worked on a client project that involved detailed design, programming and support during construction for building a semiconductor fabrication plant for a client. .

📈 DATA SCIENCE WRITING

2020

Bikeshare data analysis[5]

- Used R to create summary and visuals showing popular travel times, trip duration and user stats for the data provided by Udacity

🔗 LINKS

I have worked as a process engineer in high volume manufacturing as well as R&D. I have created a process analytics dashboard for a process with more than 40 critical parameters. I have led a team of technicians on R&D process manufacturing floor while serving as the liaison for cross functional team collaboration. I have completed training in process design for six sigma and robotic process automation. I perform best in a collaborative work environment.

I have recently started writing about engineering and statistics on my website[4]

1: https://amberahmed.netlify.app/projects
2: https://pubmed.ncbi.nlm.nih.gov/26474411/
3: https://pubmed.ncbi.nlm.nih.gov/26474411/
4: https://amberahmed.netlify.app/
5: https://amberahmed.netlify.app/projects