Cole Polychronis

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EDUCATION

WESTMINSTER COLLEGE

BS IN COMPUTER SCIENCE & BS IN MATHEMATICS Current Cumulative GPA: 3.95 Expected May 2019 | SLC, UT

COURSEWORK

Algorithms and Data Structures Computer Architecture Intro to Data Mining (Fall 2017) Database Systems (Fall 2017) Intro to Linear Algebra Intro to Statistics

SKILLS

PROGRAMMING

Java • Python • R • C++
JavaScript • HTML • Git • LaTex

ENVIRONMENTS

Eclipse · Atom · Jupyter Notebook RStudio · Sublime · TexShop

AWARDS & HONORS

DEAN'S LIST RECIPIENT

4 semesters

MEMBER OF ALPHA CHI

2016 - Present

REFERENCES

HOLLY ZULLO

Advisor in Mathematics Holly.zullo@hci.utah.edu (801)-585-4054

GREG GAGNE

Advisor in Computer Science ggagne@westminstercollege.edu (801)-832-2361

MILA GLEASON

Owner of Mathnasium of SLC (801)-913-2852

SIGNIFICANT PROJECTS

ANALYTICS LIBRARY FOR INTERACTIVE VISUALIZATIONS

Summer 2017 | Worcester Polytechnic Institute - Worcester, MA

- created a JavaScript Library (approximately 1000 lines) to collect user interaction data with interactive data visualizations and an R dashboard (approximately 200 lines) to visualize and analyze the collected data.
- performed latency analysis on visualizations of several thousand data points to ensure the program did not have an adverse effect on computer performance.
- presented the library and the findings gathered from its implementation at the Council for Undergraduate Research (CUR) Symposium in Alexandria, VA.

MODEL OF TSA SECURITY SCREENING PROCESS

Winter 2016 | Westminster College - SLC, UT

- with a team of 2 other individuals, researched basic queueing theory as a means to model the Transportation Security Administration (TSA) security screening process using R (approximately 500 lines) for the Mathematical Contest in Modeling.
- simulated several different passenger profiles that would effect the efficiency of our model to conduct a sensitivity analysis.
- awarded Honorable Mention by the Consortium for Mathematics and its Applications (COMAP), given to to the top 25% of participants, for the model we developed.

WORK EXPERIENCE

MATHNASIUM | INSTRUCTOR

Aug 2016 - Present | Salt Lake City, UT

• work one-on-one with children ranging from 1st graders to seniors in highschool and with topics ranging from numerical fluency to AP Calculus.

WESTMINSTER MATH AND COMPUTER SCIENCE TUTOR CENTER | TUTOR

Jan 2016 - Present | Salt Lake City, UT

• work one-on-one with college students from all academic backgrounds in mathematical topics ranging from college algebra to calculus, and introductory computer science topics such as basic programming and data structures.

ACTIVITIES

HONORS COLLEGE PEER MENTOR | 2016 - PRESENT

- serve as a peer mentor in the Westminster Honors College, helping a cohort of 5-6 freshmen adjust to college life and the honors college.
- facilitate 2 social events to help encourage a sense of community within the entire freshmen Honors College cohort of 65 individuals.

S-CUBED PEER MENTOR | 2016 - PRESENT

• serve as a one-on-one peer mentor, helping my mentee adjust to college life and provide my experience and advice regarding the pursuit of a major in a STEM field.