

KARSON SOMMER

(563)-528-2472 • karson-sommer@uiowa.edu • <https://karsonkevin2.github.io/Karson-Sommer/>

EDUCATION

THE UNIVERSITY OF IOWA

Master of Science, Business Analytics

- 4.00 GPA

Bachelor of Science in Engineering, Electrical Engineering

- 3.86 GPA, Graduation with distinction

- Minor: Mathematics

- President's List 2 years, Dean's List 4 years

TECHNICAL SKILLS

- Tools: Java, C++, SQL, Python, GIS

- Methodologies: Skilled in image processing, software development, and mathematical modelling

- Projects:

Strogger

11/2019 – 05/2020

Developed an Android app that provides real-time feedback and analytics on running form in collaboration with a multidisciplinary team which included biomedical engineering and law students

Smart Fire Sprinkler

01/2018 – 05/2018

Designed and constructed a self-aiming fire sprinkler system and Android application for live fire tracking by interfacing stepper motors, an infrared sensor, Arduino, and Google Firebase

EXPERIENCE

UNIVERSITY OF IOWA

Iowa City, IA

Teaching Assistant / Database Management

01/2020 – Present

- Instruct 4 one-hour classes per week and hold 3 one-hour office sessions per week
- Review and grade homework assignments for 120 students

ENVENTIVE ENGINEERING

Remote

Mathematical Programming Assistant

06/2019 – 08/2019

- Formulated pin in slot tolerance equations and developed code in C++ which were integrated into a new product
- Updated deprecated rendering functions in 100's of LaTeX documents to prevent future errors
- Validated mathematical proofs and identified and fixed software bugs using an internal bug tracker

US ARMY CCDC CHEMICAL AND BIOLOGICAL CENTER

Rock Island, IL

Data Analysis Intern

06/2018 – 08/2018

- Summarized over \$6 billion of Army Industrial Base procurement and contractor data for commanding officers
- Prepared a report on the analysis of integrating additive manufacturing into Army production facilities
- Fulfilled data requests from other departments using Microsoft SQL Server daily

ACTIVITIES & LEADERSHIP

OPENSTREETMAP

Online

Regional Contributor

12/2019 – Present

- Created over 500,000 nodes, mapping running infrastructure, public landuses, and performing quality assurance
- Developed a unique method to convert heatmaps into paths using image processing techniques in MATLAB

NCAA DIVISION I TRACK AND FIELD/CROSS COUNTRY

Iowa City, IA

Distance Runner

08/2016 – 10/2020

- Competed in 7 Big Ten Championships including a team win in 2019
- Coordinated with professors to manage coursework while travelling around the country for competition
- Awarded Big 10 Distinguished Scholar 4 years, Academic All-Big Ten 4 years, Athletic Letter 4 years