

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

Iowa City, IA
08/2020 – 12/2021

- 4.00 GPA

Bachelor of Science in Engineering, Electrical Engineering

08/2016 – 05/2020

- 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

Teaching Assistant / Database Management

Iowa City, IA
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

Mathematical Programming Assistant

Remote
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

Data Analysis Intern

Rock Island, IL
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

Regional Contributor

Online
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

Distance Runner

Iowa City, IA
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