JEREMY KRUMAN

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SOFTWARE ENGINEER & DEVELOPER

EDUCATION

- Bachelor of Science in Computer Science, University of Michigan, GPA 3.7, December 2017

- Coursework: Software Engineering, Web Databases and Information Systems, Data Structures and Algorithms, Database Management Systems, Introduction to Computer Security, Discrete Mathematics, Foundations of Computer Science, Programming Languages, and Organic Chemistry

- Programming Languages & Tools: C++, Python (Flask), C, Java, HTML, CSS, SQL, JavaScript (Node.js), Unity, Git, and Bash

PROJECT EXPERIENCE

Doctor Notepad
Website with accompanying mixed-reality application for University of Michigan Health Systems doctors to monitor current patients. Reinforced web design skills, introduced tools for writing mixed-reality applications, and provided exposure to real-world software engineering practices such as team collaboration and incorporation of client feedback.

Codenames
Digital version of Codenames, a word association board game, written in Java with a GUI built on the Swing framework.

SillyQL
SQL-like relational database program written in C++. Increased proficiency with object-oriented programming, use of dynamic memory, and use of complex data structures such as binary search trees and hash tables.

Search Engine
Website for searching a large collection of documents, built using Flask and Hadoop. Introduced to the fundamentals of information retrieval including MapReduce frameworks, inverted index construction, and cosine similarity score calculation.

WORK EXPERIENCE AND ADDITIONAL ACTIVITIES

Programmer Intern, University of Michigan Department of Anesthesiology   Summer 2017

Created a web application to assist developers in managing large sets of medical data for access by researchers. Gained experience learning new tools, writing production-quality code, and collaborating with other programmers, researchers, and medical personnel. Offered a full-time position beginning December 2017.

Vice President, Michigan Cubing Club (Rubik's Cube)   2013 – present

Explore different techniques for solving puzzles in more efficient ways, which reinforces programming skills such as logic, algorithms, and innovative thinking. Teach beginners how to solve puzzles by breaking down abstract concepts and complex algorithms into understandable parts. Collaborate to organize official World Cube Association competitions for hundreds of attendees.

Writer, Gargoyle Magazine   2013 – Present

Write articles for the official, student-written humor magazine at the University of Michigan to hone writing and creative thinking skills. Present ideas for published content and offer constructive critiques to peers.

Camp Counselor, Roeper Summer Day Camp   2012 – 2015

Mentored counselors-in-training and ran camp activities, improved problem solving and communication skills through daily interactions with campers, counselors, and parents.