# Joshua Hatfield

josh.o.hatfield@gmail.com | (317) 800-4091

Current Address: 529 Ridge Rd. Greenwood, IN 46142

#### **PROFILE**

Recent graduate in informatics seeking to employ my programming, SQL database management, and SDLC skills in a software engineering or IT analyst role to enhance an organization's IT posture.

## **TECHNICAL SKILLS**

Certifications: ISC2 Certified in Cybersecurity (CC), AWS Certified Cloud Practitioner

Programming Languages: Python, R/RStudio, C, Java, PHP

Platforms: Linux, Microsoft Windows

**Databases:** MySQL, MariaDB, Microsoft Access **Web Development:** HTML5, Flask, JavaScript, CSS

Miscellaneous: JavaFX, Scene Builder, GitHub, Figma, NIST 800-171, Wireshark, Microsoft Excel, @RISK Monte Carlo, PuTTY

# **EDUCATION**

#### Indiana University, Luddy School of Informatics, Computing, and Engineering | Bloomington, IN

May 2023

GPA: 3.90 / 4.00

Bachelor of Science in Informatics, Summa Cum Laude

• Minor: Security Informatics

# **EXPERIENCE & COURSEWORK**

#### Capstone Senior Course and Project | Bloomington, IN

August 2022 - May 2023

- Spearheaded comprehensive 130 page documentation for team web-based study group management application, encompassing database schema design, UX workflow through 30+ Figma wireframes, and governance considerations
- Engineered robust PHP JSON tokenization decoder to enhance session management for Google login API requests, contributing to improved security and seamless user authentication with the MySQL database
- Implemented CRUD logic for user profile and ticket support epics using Scrum methodology, HTML5, CSS, and JavaScript
- Facilitated user-centric refinements by coordinating 8+ interviews, observations, and usability studies, leading to a 25% improvement in user satisfaction after final evaluations

#### Machine Learning Intrusion Detection Research | Bloomington, IN

*January* 2023 – May 2023

- Investigated and synthesized research for Systems and Protocol Security course, focusing on reducing data preprocessing latency, comparing classifiers, and identifying network isolation patterns advantageous to machine learning intrusion detection systems (IDS)
- Articulated findings as well as suggestions for IDS interoperability between network and kernel-level data to 50+ colleagues

#### Java Team Project | Bloomington, IN

March 2023 - April 2023

- Collaborated with four-member team within application development course, taking charge of designing and constructing frontend for Java-based order and customer management system using Scene Builder
- Integrated and tabularized pre-existing order data from CSV file into TableView columns upon program initialization, resulting in a 30% improvement in data accessibility for parsing order entries
- Orchestrated seamless interaction between application windows with JavaFX controllers, ensuring responsive UX upon satisfying predefined conditions and handling exceptions efficiently (e.g., enabling order confirmation functionality after validating inputs)

# C Socket Encryption and Decryption Program | Bloomington, IN

November 2022 – December 2022

- Established UDP server with socket descriptor bound to server address, enabling client datagram delivery using sendto() method
- Applied decryption techniques to decode client's ciphertext, successfully transposing characters back to plaintext after deciphering secret key attached to datagram

## LEADERSHIP & INVOLVEMENT

## Hudson and Holland Scholar | Bloomington, IN

August 2019 – May 2023

- · Partook in annual Leadership, Engagement, Academic, and Diversity (LEAD) experiences through campus initiatives and seminars
- Delivered research on the financial paradigm for undergraduate student borrowers as part of the associated foundations course

# Kelley-to-Kelley Mentoring Program | Bloomington, IN

June 2020 – June 2021

- Provided guidance on course responsibilities, internship opportunities, and club involvement for freshman student in the Kelley School of Business, aiding their acclimatization to academic and professional roles
- · Recommended additional resources and tutoring, contributing to the student's successful start in introductory business courses