## Zacharia Kornas

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#### **EDUCATION**

#### University of Washington, Seattle, WA

Dean's List, 3.9 GPA

Bachelor of Science, Major: Informatics

*Relevant Courses:* Foundations of Programming I/II, Data Science Foundations, Client-Side Development, Information Assurance and Cybersecurity, Databases and Data Modeling, Data Structures and Algorithms, Networking and Distributed Systems, Data Science I.

## **SKILLS**

Programming Languages: Java, Python, Javascript, HTML, CSS, and R.

Technologies: React, Node.js, SQL, MySQL, Git/GitHub, Postman, Firebase, Linux

Concepts: Object-oriented design, Program Runtime Optimization, Software Development Life Cycle

## **EXPERIENCE**

#### University of Washington, Information School

Teaching Assistant INFO 310 - Information Assurance and Cybersecurity

Sep. 2023 – Present

- Assisting students in understanding fundamental cybersecurity concepts.
- Working with instructor to improve course materials, assignments, and lab exercises to enhance learning experience.
- Leading weekly labs to provide additional learning support by demoing practical cybersecurity skills and tools.

# University of Washington, Academic Technologies

Systems Consultant

Jan. 2022 – Present

- Develop and maintain macOS and Windows-based disk images and application packages for quarterly deployment.
- Assess and ensure adequate security protocols are followed for over 300 machines across multiple campus buildings
- Monitor and respond to ongoing security risks throughout the lab.

#### YMCA OF GREATER SEATTLE

Membership Services Lead

Aug. 2022 - Jun. 2023

• Supervise frontline staff and provide leadership for high quality customer service.

Membership Engagement Representative

Sep. 2019 - Aug. 2022

• Provided quality customer service to members, guests, and program participants while adhering to YMCA policies and procedures. Maintained safety and security as a top priority.

#### RESEARCH PROJECTS

### University of Washington

Tor Research (SimulaTor)

Feb. 2023 - Present

- Designing and conducting an experimental study to explore bandwidth inflation to alter traffic of the Tor network through malicious relays.
- Deployed 13 Raspberry Pis configured as various types of nodes to simulate a micro-Tor network.
- Developing "SimulaTor"; a framework for constructing a simulated Tor network using physical nodes to help support efforts of replicability in security research.

## PERSONAL PROJECTS

## University of Washington, Academic Technologies

Multiplayer Tic-Tac-Toe - github.com/zkornas/TicTacToeRFC

May 2023 - Jun. 2023

- Developed a multiplayer Tic-Tac-Toe game in Java, adhering to the Tic-Tac-Toe protocol RFC to enable users across diverse platforms to connect to a central server and engage in seamless, real-time gameplay.
- Designed a robust client-server architecture to manage player communication and synchronize sessions.
- Ensured sophisticated error handling and input validation mechanisms to maintain uninterrupted interactions between clients and the server.

## University of Washington, Academic Technologies

Dub Dumps - github.com/info340b-sp22/Dub-Dumps

Apr. 2022- Jun. 2022

- Created a react-based website for students to easily find and rate campus bathrooms using school email authentication. Implemented sorting by proximity, accessibility, and ratings for user-friendly experience
- Utilized firebase for secure user data management and hosting.
- Developed for the full stack by constructing an intuitive U.I. as well as optimized data logic for structured queries.