

School Address:

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IOANNIS KYRIAZIS

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EDUCATION:

Worcester Polytechnic Institute (WPI), Worcester, MA, May 2021

Bachelor of Science in Computer Science, GPA 3.5

Related Coursework:

Tools and Techniques in Computer Network Security; Advanced Digital Circuit Design w/ FPGAs; Software Engineering; Operating Systems; Software Security Engineering; Embedded Computing in Engineering Design;

SKILLS:

Programming Languages: Java, C/C++, Arduino, Verilog, Python, JavaScript, Apache Derby, MySQL

Operating Systems: Windows (XP, 7, 10), macOS, Arch Linux, Android, Ubuntu, Raspbian, OP-TEE

Software: gdb, Ghidra, Eclipse, Arduino IDE, Vivado, Scenebuilder, git, WebStorm, IntelliJ, Trello, Gradle

PROJECTS:

Software Engineering in Collaboration with Brigham & Women's Hospital, WPI, March – May 2019

Contributed to a ten-person team working in a competition to apply Agile development methodologies and design patterns in Java to create a pathfinding kiosk application, map builder, room scheduler, etc. Gathered software requirements by surveying, brainstorming, creating user stories, scenarios and storyboards.

Implemented two-factor authentication, logging into the kiosk with an RFID card, salt/hashed password storage, and an internal transportation request menu. Our team won best application in the first and second iteration.

Interactive Qualifying Project (IQP), Cuenca, Ecuador, October – December 2019

The Maria Amor Foundation: A Case Study on Holistic Healing

Facilitated weekly sponsor meetings in Spanish. Interviewed female victims of domestic abuse in Spanish.

Optimized interview transcription process. Managed and operated filming equipment to capture data from interviews. Produced videos that showcase the unique ecologically sustainable aspects of our sponsor. Followed Strunk's Elements of Style to edit final report for clarity, concision, and cohesiveness.

Software Security Engineering WPI, March – May 2019

Utilized buffer overflow to inject instructions that hijacked code flow. Crafted ROP chains to bypass stack randomization and non-executable memory. Exploited format string vulnerability to redirect code flow.

Executed arbitrary code with stack randomization enabled by including NOP sled in payload.

EXPERIENCE:

Undergraduate Researcher, WPI Data Science, Worcester, MA, May – October 2019

Researched trusted execution environments to keep machine learning model parameters confidential. Reviewed hardware platforms that support ARM TrustZone security mechanisms. Executed machine learning models in a trusted execution environment. Automated tasks to streamline development process. Wrote concise notes that communicated our weekly findings. Presented our research poster at the WPI Poster Presentation Symposium.

Assistant Manager, Franco's Pizza, Worcester, MA, May 2015 – July 2019

Trained and coached employees. Received and inspected food from distributors. Sourced and installed HD IP cameras which saved \$2000. Deployed store website thereby saving \$4000 in maintenance, creation, and hosting fees. Trusted to open, run, and close store alone.

AWARDS:

Dean's List, Spring 2019, Fall 2019

WPICTF 2019, Third Place