NICHOLAS HARRAS

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EDUCATION

Rutgers University   New Brunswick, NJ
B.S. in Computer Science   *August 2018*

- **Related Coursework:** Linear Optimization, Computer Security, Databases, Internet Technology, Systems Programming, Algorithms, Principles of Programming Languages, Intro to A.I., Computer Architecture, Discrete Structures I/II, Linear Algebra, Calculus I/II, Data Structures

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PROJECTS

OpenSSL Message Board Project

Client and server programs written in **Python** designed to emulated how TLS encryption/decryption works. Also quickly models good password storing practices.

- Utilizes the SSL, Socket, Threading, and HashLib Python modules
- Sets up a secure connection before encrypting/decrypting any packets via RSA keys and certificates
- Tests user credentials against salted password hashes

Protostar Exploits Assignment

Practiced finding and exploiting insecure **C** functions using **Python** scripts and **GDB**

- Worked in a virtual **Linux** environment in **VirtualBox**
- Disassembled compiled **C** programs in **GDB**
- Practiced writing simple scripts to help manipulate memory

"BuyMe Shop" Databases Project

EBay-inspired database model, built with an **AWS MySQL** server and **JSP** webpages

- Modeled a database schema that suited our given needs, then built it in **MySQL**, hosted on **AWS**
- Worked with **HTTP** methods so webpages could communicate with each other
- Ran various QA tests and bugfixes against user inputs

EXPERIENCE

SEMGeeks   Belmar, NJ
Web Development Intern   *September - December 2017*

- Worked closely with web developers and designers to help create websites for small businesses
- Utilized **WordPress** and **HTML/CSS** in a professional setting
- Researched malicious **PHP** scripts that had stolen client information using steganography

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CAMPUS ACTIVITIES

Undergraduate Student Alliance of Computer Scientists   Piscataway, NJ
Mentor/Member   *September 2016 - June 2018*

- Taught a group of four CS students the basics of **Bash**, **Git**, as well as data structures and other CS concepts
- Offered guidance to CS students with respect to clubs to join, topics to explore, textbooks to read, etc.
- Assisted computer science first-years with their coursework

HackRU   Piscataway, NJ
Volunteer   *May 2017*

- Assisted competitors throughout the event as a technical advisor, specifically regarding **Python** and **Java**

SKILLS

- **Programming Languages:** Proficient in Python, C, and Java; Familiar with C++, JavaScript, and Lisp (Scheme)
- **Technology and Software:** Git, GDB, VIM, Nmap, WireShark, VirtualBox, MySQL, JSP, AWS (RDS and EC2), WordPress, HTML/CSS, LaTeX