

# Chase Kanipe

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University of Maryland - Bachelor of Science (2021)  
Major - Computer Science (*Cyber specialization*)  
Minors - Physics, ACES Minor

Certification - OSCP (*Offensive Security Certified Professional*)

## Experience

### Research Assistant — Joint Quantum Institute

June 2019 - Current

Programming ARTIQ hardware to interface with quantum computation and atomic physics experiments. (Python, Rust)

### Software Development Intern — MPLEX VR

May 2018 - Current

Developed virtual reality environments for a VR startup. We recently received a \$500,000 investment. (UE4, C++, Maya, Substance)

### Research Assistant — UMD Autonomous Unmanned Systems

June 2018 - August 2018

Worked under Dr. Derrick Yeo through F.I.R.E. at UMD with visualizing security vulnerabilities in the DSRC wireless protocol (C, Python)

### Software Development Intern — The Precision Alliance

June 2017 - August 2017 and June 2015 - August 2015

Database and web design for over 2750 types of bearings and telescopes.

## Selected Projects

### Security Analysis of DSRC Protocols — C++/Python

Built a simulation to demonstrate security vulnerabilities in proposed vehicle communication protocols

### Quantum Key Distribution Simulator — Python

Python scripts to simulate attacks on QKD implementations

### Raw-Socket Port Scanner — Python

Raw socket python script for host discovery and service fingerprinting

## Skills

### Programming (Fluent)

C, Java, Python

### Programming (Proficient)

x86, Rust, OCaml, Ruby

### Reverse Engineering

Radare2, GDB-PEDA, Windbg

### Penetration Testing

Nmap, Wireshark, Burp Suite, Metasploit, Beef XSS, etc.

### Graphics

UE4, Maya, GIMP, Substance

### Other

Github

## Extracurricular

UMD Cybersecurity Club

UMD XR Club

Terrapin Record Label

Society of Physics Students

## Awards

Accepted to speak at AIAA on cybersecurity and aerospace

MRHS "Computer Science" Award

Member of SPS National