# George Tong

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#### Education

#### University of Maryland College Park (UMCP)

- Bachelor of Science Degree in Computer Engineering, GPA 3.98/4.0 [Expected May 2019]
- Advanced Cybersecurity Experience for Students Honors Program Citation [Expected May 2017]
- Recipient of the Full Banneker/Key Scholarship, Member of Dean's List

#### Skills

- Languages: Java (Proficient), JavaScript (Proficient), C, Ruby, OCaml, Python, Bash, Y86 Assembly, HTML5/CSS3, Matlab
- Frameworks/Libraries: React Native, Node.js, Express.js, Socket.IO, D3.js, JQuery, Bootstrap
- Other: MongoDB, Git, Pug, Raspberry Pi, Unix, Adobe Photoshop, Android App Development, Arduino, Machine Learning

# Work Experience

#### Adelphi Army Research Lab - Software Engineering Intern

[May - August 2016]

- Independently developed full stack of web app (using JavaScript, MongoDB, Node.js, Express.js, HTML5, CSS3, Pug, D3.js) that supported historical graphs and live streams of power data through websockets
- · Created TCP Server that collected and stored data from multiple concurrent sensors via sockets
- Developed email notification system of 'bad' data, secure login, command interface to send commands to connected sensors, and online graph manipulation tools

### Leadership

#### Terrapin Freelancers - Co-Founder/President

[April 2016 - Present]

- Founded Terrapin Freelancers (www.terrapinfreelancers.com), a University of Maryland freelance team focused on providing streamlined, quality solutions to a wide realm of technical issues
- Negotiated custom sponsorship package with Bitcamp (UMCP's student run hackathon) Board of Directors in return for software development

#### **Projects**

#### Bitcamp Android/iOS App and Website

[September 2016 - Present]

- Spearheading team effort in building Bitcamp Android/iOS App, upgrading website, and developing a new QR-Code check in system
- · Coding mobile app in React Native to allow for cross-platform compatibility
- App will allow event organizers to push out real time notifications and provide users with information about sponsors/prizes

#### Video Classification Tool

[January 2017 - Present]

• Developing a tool that uses Convolutional Neural Networks to identify clips of specific people in videos using Python, Google TensorFlow, and OpenCV3

#### High Interaction Honeypots Research

[January - May 2016]

- Designed honeypot systems with ssh password vulnerabilities in order to study attack habits
- Created data collecting scripts (bash) and installed command loggers in order to track what a hacker actually does in a compromised system

# Competitions

#### Daemon Dash Hackathon

[January 2017]

 Hacked together a streamlined web app that planned a person's day based on mood, location and date utilizing Google Places API, Node.js, Express.js and React

#### UMCP Bitcamp Hackathon

[April 2016]

• Developed TapJam, a music collaboration Android app (Azure, Java, and SignalR) that listens to the sound inputs of concurrent users in real time

# OSV Terrain Showcase Competition $\mathbf{2}^{\mathbf{nd}}$ Place

[January - May 2016]

- Worked with a team of engineers to create an autonomous Over Sand Vehicle that could identify properties of obstacles. Vehicle was controlled via Arduino and sensors
- **Leader** of code (C based) and machine algorithm team

#### Georgetown University HoyaHacks

[January 2016]

- Developed and coded "Whisp", a crowd sourced Android app (Java)
- · Users could anonymously record ten second sound bites, which were associated with their location
- Other users who had the app could then listen to the audio, but only if they were in the same location

## Northrop Grumman CyberEngineer Competition **2<sup>nd</sup>** Place

[September - December 2015]

- Created a Raspberry Pi based mailbox notification system
- Designed and built web app (Node.js, Expess.js, Azure, MongoDB, Twilio) that communicated with the Raspberry Pi and sent text message notifications