

# George Tong

gtong@terpmail.umd.edu / 240-888-9382  
www.linkedin.com/in/GeorgeTongUMD  
www.github.com/goccert25  
www.georgetong.me

## Education

### University of Maryland College Park (UMCP)

- Bachelor of Science Degree in Computer Engineering, **GPA 3.97/4.0** [Expected May 2019]
- Advanced Cybersecurity Experience for Students Honors Program Citation [Expected May 2017]
- Recipient of the **Full Banneker/Key Scholarship**, Dean's List awardee

## Skills

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

## Work Experience

### Zynga – Software Engineering Intern

[May 2017 – Present]

- Interned on the Words With Friends Web Team
- Developed a game from inception to workable prototype, implementing a turn-based system, online play, end of game reset state, and points tracking.
- Gained experience in quickly familiarizing and working with large code bases

### 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

### Video Classification Tool

[January 2017 - Present]

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

### Bitcamp Android/iOS App and Website

[September 2016 – April 2017]

- Spearheaded team effort in building Bitcamp Android/iOS App, upgrading website, and developing a new QR-Code check in system
- Led development of mobile app (React Native) that allowed event organizers to push out real time notifications and provide users with information about sponsors/prizes

### High Interaction Honeypots Research

[January – May 2016]

- Built 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 2<sup>nd</sup> 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

### 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, Express.js, Azure, MongoDB, Twilio) that communicated with the Raspberry Pi and sent text message notifications