

# George Tong

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## 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 [Received May 2017]
- Recipient of the **Full Banneker/Key Scholarship**, Dean's List awardee

## Skills

- Languages: Java (Proficient), JavaScript (Proficient), C (Proficient), Ruby, OCaml, Python, Bash, 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, MIPS, Android App Development, Arduino, Machine Learning, Networking

## Work Experience

### Zynga – Software Engineering Intern

[May – August 2017]

- Interned on the Words with Friends Web Team
- Developed a game (using Javascript, Less, HTML, Knockout.js) from inception to workable prototype, implementing a turn-based system, online play, and points tracking
- Gained experience in quickly familiarizing and working with large code bases
- Won **1<sup>st</sup> place** at Zynga's intern hackathon for developing a Facebook Instant Game

### 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

### UMCP CS Department – CMSC351 (Algorithms) Teaching Assistant

[August 2017 - Present]

- Selected as one of six undergraduate teaching assistants based on academic performance
- Hosted weekly office hours available to around 500 students, graded papers, and wrote exams

## Leadership

### Terrapin Freelancers – Co-Founder/President

[April 2016 – August 2017]

- Founded Terrapin Freelancers, a University of Maryland technical freelance team focused on providing software solutions to clients
- Negotiated custom sponsorship package with Bitcamp (UMCP's student-run hackathon) Board of Directors in return for software development

## Projects

### MeeshQuest

[August 2017 – December 2017]

- Developed my own Google Maps implementation in Java using multiple data structures (Quadrees, Skip Lists, B+Trees, etc.) for my Data Structures class's semester long project

### Video Classification Tool

[January 2017 – December 2017]

- Created 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 Honey pots 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

### 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
- Led the development of Arduino code (C based) and navigation logic

### 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