

# Forest Wu

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## EDUCATION

**BS, COMPUTER SCIENCE | GPA: 3.64 | UNIVERSITY OF MARYLAND, COLLEGE PARK | DECEMBER 2021**

- **Advanced Cybersecurity Experience for Students (ACES) minor, ACES Honors program**
- **Presidential Scholar:** Merit scholarship provided to select students upon acceptance to university.
- **Coursework:** Operating Systems, Programming Language Paradigms, Computer Systems, Reverse Engineering, Pen Testing, Database Design, Algorithms II, Data Structures, iOS Development, IoT security

## SKILLS

- **Languages:** Java, C, Python, Swift, NodeJS, Ruby, OCaml, Rust, ReactJS, Assembly, C++
- **Tools:** Git, Linux, Kubernetes, Terraform, Docker, AWS, Postgres, Django, RoR, Ghidra, Spark, RSpec

## EXPERIENCE

**SECURITY ENGINEERING INTERN | PAYPAL | MAY 2021 –AUGUST 2021**

- Designed and implemented a cloud security posture management tool that watches over critical AWS resources owned by Braintree. Highlights any public-facing resources that might pose a threat.
- Built an event-driven AWS pipeline using Serverless. Utilized EventBridge and AWS Lambda to detect changes the AWS environment in real-time, displayed through a Rails web app hosted on Kubernetes.

**SOFTWARE ENGINEERING INTERN | DULLES GLASS | JUNE 2020 –AUGUST 2020**

- Created API for existing CRM software, delivering updated information on customer profiles. Provided employees a means to dynamically and efficiently update user permissions of clients.
- Cleaned up large amounts of critical data in DynamoDB database for CAD product. Ensured data integrity involving serial numbers/sizes/prices of glass products, resulting in fewer customer support requests.

**WEB ENGINEERING INTERN | TENABLE | JUNE 2019 – OCTOBER 2019**

- Developed Slackbot for tech support team, streamlining customer information lookup. Formatted UI and response messages through slack API. Handled auth token regeneration and Salesforce API queries.
- Launched [tenable.com/downloads](https://tenable.com/downloads), which currently serves 100,000 requests/day. Implemented email blacklists and employee login while adding a full suite of unit/integration tests.
- Published a private library to our corporate npm registry on Nexus Cloud containing commonly used functions between various projects, such as a bearer token validator, shutdown handler, and country locator based on IP.

**INFRASTRUCTURE INTERN | NOAA | JULY 2017 – AUGUST 2017**

- Collaborated with Raytheon to update NOAA's RHEL servers with zero downtime. Unblocked the central servers from receiving critical security updates to run Advanced Weather Interactive Processing System II.
- Prototyped test cases for NOAA's data delivery software, allowing Weather Forecast Offices and River Forecast Centers within the National Weather Service to create ad-hoc or subscription-based weather data requests.

## TECH LEADERSHIP

**CLUB LEAD | GOOGLE DEVELOPER STUDENT CLUBS | JULY 2020 – MAY 2021**

- Founded the UMD chapter and recruited a core team of five member from an initial meeting of 40 participants.
- Held technical workshops on Google developer technologies such as flutter and firebase.

**DATA CLASSIFICATION SERVICE | AMAZON WEB SERVICES | SEPTEMBER 2020 – DECEMBER 2020**

- Collaborated with peers and AWS mentor to design a data classification service that monitors object payloads.
- Utilized AWS to design a microservice architecture that checks a file's hashsum against common malware.
- Trained machine learning model using AWS Sagemaker to determine file type based on byte analysis.

**TEACHING ASSISTANT | APPLIED CYBERSECURITY FOUNDATIONS II | JULY 2020 – MAY 2021**

- Provisioned and plan a semester-long honeypot project that imitates common targets of cyber attacks.
- Introduced students to project management, holding standup through deployment/data collection/analysis.
- Monitored students' MITM, ssh rules, firewall rules, and other networking rules.