# Forest Wu

240-342-9183 | forestliwu@gmail.com | www.linkedin.com/in/forestlwu | https://github.com/4estwu

## EDUCATION

**BS, COMPUTER SCIENCE | GPA: 3.64 | MAY 2022 | UNIVERSITY OF MARYLAND, COLLEGE PARK**
- **Presidential Scholar**: Merit scholarship provided to select students upon acceptance to university.
- **Advanced Cybersecurity Experience for Students (ACES) minor, ACES Honors program**
- **Coursework**: Operating Systems, Programming Language Paradigms, Computer Systems, Reverse Engineering, Pen Testing, Database Design, Algorithms II, Data Structures, Mobile Development, IoT security

## SKILLS
- Languages: Java, C, python, swift, NodeJS, Ruby, OCaml, Rust, ReactJS, Assembly, C++
- Tools: git, Linux, Kubernetes, Terraform, Docker, AWS, Jenkins, Postgres, Django, Ghidra, Spark, Wireshark

## EXPERIENCE

**SECURITY ENGINEERING INTERN | BRAINTREE (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 terraform. Utilized EventBridge, SQS, and a Ruby on Rails webhook to detect changes to the AWS environment in real-time, displayed through a Slackbot UI.

**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 essential data in DynamoDB database for CAD product. Wrote validation scripts, formatted JSONS, and ensured data integrity involving serial numbers, sizes, and prices of various glass products.

**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, currently serving 100,000 requests/day. Implemented multiple features such as 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**
- Collaborate with peers and AWS mentor to design a data classification service that monitors object payloads.
- Utilize AWS to design a microservice architecture that checks a file's hashsum against common malware.
- Train machine learning model using AWS Sagemaker to determine file type based on byte analysis.

**TEACHING ASSISTANT | APPLIED CYBERSECURITY FOUNDATIONS II | JULY 2020 – MAY 2021**
- Provision and plan a semester-long honeypot project that imitates common targets of cyber attacks using VMs.
- Introduce students to project management, holding standup through deployment/data collection/analysis.
- Monitor students' MITM, ssh rules, NAT rules, and firewall rules, and other networking for VMs and containers.