Benjamin Young
bay19@pitt.edu | https://byoung585.github.io

Education

Master of Science in Computer Science, University of Pittsburgh, Pittsburgh, PA
December 2022 (Anticipated Graduation Date)

- Completed MS project in Human-Computer Interaction lab related to the development of a programmable robot and chatbot

Bachelor of Science in Computer Science, University of Pittsburgh, Pittsburgh, PA
December 2021

- University of Pittsburgh Honors College Member
- School of Computing and Information Dean's List
- Graduated Magna Cum Laude
- TA for Computer Organization and Assembly Language
    - Led a recitation section consisting of ~15 students. Reviewed class material with the students and ensured they were well-prepared for assignments.
    - Held weekly office hours to assist students in their understanding of the material.
- Research Assistant in a Human-Computer Interaction Lab
    - Kept up to date on relevant literature and analyzed how it applied to the lab's work.
    - Implemented prototypes of systems designed in the lab.
- President of Sports Analysis Club at Pitt
    - Led discussion on a wide variety of professional and collegiate sports in meetings consisting of 20+ members.

Experience

May 2021 – August 2021
Software Engineering Intern, Salesforce, Indianapolis, IN
Member of Agile DevOps team responsible for managing infrastructure that sends 3.2 billion emails per day

- Implemented a series of automations to configure email sending software, run smoke tests on configurations, and automatically create change requests. These automations save 10 hours of manual work per week and clean up technical debt.
- Implemented new CI/CD pipeline to automatically create message transfer agent configurations, manage them via GitHub, test them through the dynamic creation of a Docker container in TeamCity, and deploy the configurations via TeamCity. This replaces a manual process, adding testing, validation, and automatic deployment, as well as increasing the speed which new configurations can be deployed.
- Developed a custom Terraform module that reduces the time needed to deploy a new virtual machine, saving 15 hours weekly. This allows virtual machines to be configured in a simple and version control friendly way, instead of manually configuring each new virtual machine.

May 2019 – May 2021
Software Engineering Intern, Carnegie Mellon University Software Engineering Institute, Pittsburgh, PA
Member of Agile full-stack development team responsible for developing web applications to facilitate cybersecurity training and exercises

- Developed two custom Terraform providers, allowing cybersecurity exercises and related resources to be created in a way that is simple, programmatic, and efficient. Engineers use these providers to create exercises instead of doing so manually with a GUI.
- Added significant functionality to multiple web applications, including webhooks, advanced text searching, and the ability for users to create custom diagrams consisting of images and click points, using Angular and C#.
- Led the development of a Java desktop application that consolidates information on the NICE cybersecurity framework, creating a single place where team members can easily query for information, instead of relying on searching through websites.

Skills

- **Programming Languages**: Java, Python, Go, C#, C, Rust, TypeScript, HTML, CSS, JavaScript, SQL, PHP, R
- **Frameworks**: Angular, .NET Core, Flask, JUnit, Selenium
- **Technologies**: Terraform, Jira, Linux, Git, Confluence, PostgreSQL, LaTeX, Chef, Splunk, Monit, TeamCity
- **Development Methodologies**: Agile Development, Test Driven Development