GT OSPO Virtual Student Internship Program

2/27/2024

Outline

Introduction of OSPO@GT
- Core Objectives

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- Timeline

Student Application Process

Georgia Tech's Open Source Program Office (OSPO) aims to build open-source capacity on campus and at nearby academic institutions through education on best practices, outreach, and training and engagement of students.

OSPO@GT Core Objectives

Build an OSS Ecosystem on Campus

Establish an OSS Standard for GT

Develop and share best practices for open-source software development at the institute level via an OSS research hub

How to create an open-source project

How to choose a license

How to develop and grow an open source community

Training

Create and support a virtual summer internship experience targeted to introduce students to new open-source research projects and experiences

Technical Training & Workshops on the usage of key OSS tools (Git, containers, CI/CD) and how to engage with OSS projects

Sustaining OSS

Build the university's capacity to curate, manage and maintain open-source software throughout the software lifecycle

e.g., Archival techniques to preserve open-source software

Outreach to Local Universities

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OSPO Virtual Internship Program Details

OSPO Virtual Internship Program

10 week program, starting in May and running through July, 2024

Students apply and are selected by OSPO team
- OSPO can fund undergrad student work up to 20 hours per week for up to 20 students
  - A few (2-4) graduate students can also potentially be selected
- OSPO will help to drive the initial student selection process and mapping to teams

Program consists of close interactions with mentors on project team and weekly seminars to share open-source concepts
- Milestones for reporting of interactions with students along with a virtual poster session at the end of the internship
- Modules focused on developing core skills to enable students to **contribute to open source projects** and **initiate their own open source projects**
- Discord group allows for asynchronous interactions with mentors and students

OSPO Virtual Internship Program – Added Details

- The program is anticipated to require 20 hours per week of work, and the program runs from mid-May to the end of July
  - Paid students are hourly and must fill out timesheets
  - You do not need to enroll in classes at Georgia Tech to apply/participate

- Students must be enrolled at Georgia Tech during the calendar year with at least one semester remaining in their degree program
  - Currently not able to engage with students outside of Georgia Tech but anticipate looking at this as a future option

- There are no visa / citizenship requirements for applying to the internship

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Virtual Internship Program – Timeline (1 of 2)

Date	Activity	Notes
March 15, 2024	Applications for Summer 2024 Close	
March 29, 2024	Students Notified for Summer Program	
April 2024	Selected Students are Hired by GT	
May 13th	Virtual Internship program officially begins	
(Week of) May 20th	Submission of official milestones for students	Mentors and students meet and discuss projects and set milestones
May 20th	OSS Module 1 – Review Git Best Practices	All modules are virtual workshops with slides / hands-on
May 27th	OSS Module 2 – Contributing to OSS	Work through PRs, issue tracking
June 3rd	OSS Module 3 – Testing your Code	Discuss CI/CD and basic testing
June 10th	OSS Module 4 – Code Reviews	Learn how to review PRs and team communication

Virtual Internship Program – Timeline (2 of 2)

Date	Activity	Notes
(Week of) June 17th	Milestone 1 – Midterm Check-in	Discuss any sticking points with teams
June 24th	OSS Module 5 – OSS Tips and Tricks	Talk about lessons learned from existing OSS communities
July 1st	OSS Module 6 – Building OSS Community	
July 8th	Milestone 2 – Midterm Check-in	
July 15th	Finalize OSS Contributions	Work on cleaning up and code/documentation contributions
July 22nd	Final Poster Presentations	

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Student Application Process

Virtual Internship Program – Student Applications

If you are interested please apply by **March 15ᵗʰ**

1) Go to https://ospo.cc.gatech.edu/vsip/

2) Check out slides and lightning talks linked from our Github page (recording will also be there)

3) Apply and select up to 5 projects that interest you!
   - Projects are randomized in the form
   - We will use these selections to pair students with projects and mentors

Informational Session for Students

If you are interested to learn more about this internship, please join us on February 27ᵗʰ from 4:30 to 6 hear about potential projects through lightning talks from our IBM research partners. The session will agenda site below.

Register to join the informational session via this [zoom link].

PROJECT AND LIGHTNING TALK INFORMATION

Student Applications

Students must apply using the form below by March 15th, 2024. Students will be notified on March 29 projects.

SUBMIT AN APPLICATION

3. Please select up to 5 proposed projects based on your level of interest. Clic learn a bit more detail about the project's goals and expected student enga

Please select at most 5 options.

☑ Analog Neural Architecture Search <https://github.com/IBM/analog-nas>

☐ Open Horizon <https://lfedge.org/projects/open-horizon/ >

☑ z/OS Open Tools <https://github.com/ZOSOpenTools>

☐ IBMWeatherGen <https://github.com/IBM/IBMWeatherGen/>

☐ SPIFFE/SPIRE/Tornjak <https://github.com/spiffe/tornjak>

☑ Alpine Linux <https://alpinelinux.org>

☐ PyTorch <https://github.com/pytorch/>

☑ OpenTelemetry <https://github.com/open-telemetry>

☑ ComplianceTrestle <https://github.com/oscal-compass/compliance-trestle>

Lightning Talks

Each Talk Should Tell You

1. ### What the project is about
   - maintainers and the Github / URL for the project

2) ### Project Ideas
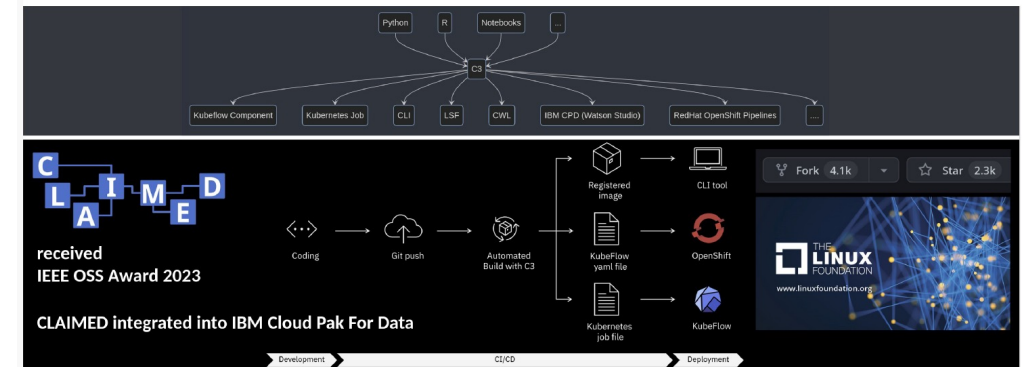   - Ideally mapped to different skill levels

3) ### Contact Information

https://github.com/claimed-framework

Ping romeokienzler on discord or romeo.kienzler1@ibm.com

received IEEE OSS Award 2023

CLAIMED integrated into IBM Cloud Pak For Data

The sky is the limit ... for you to work on Open Liberty

Novel Applications
Demo cloud-native Java technologies in a fun way

Liberty Space Rover
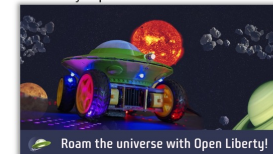
Liberty Bikes

Samples & Guides
Create technical assets for developers to learn to build real-life applications

Sample App using Jakarta EE Security, MicroProfile JWT, and Keycloak

Liberty Components
Contribute to core components for the runtime and tools for developers

Project Ideas

- Behavioral similarity search using graph embeddings
  [skills: Python, Go, Vector Databases, ML]

- Add Yara or KQL rules interpreter to SysFlow
  [skills: Go, detection engineering]

- Explainer for SysFlow traces/graphs (given a trace, summarize attack TTPs and kill chains in English)
  [skills: Python, ML, Linux]

- Help develop tutorials using our data science APIs
  [skills: Python, ML, Data Visualization, Data Science]

- Become a documentation *czar!*
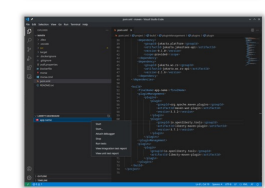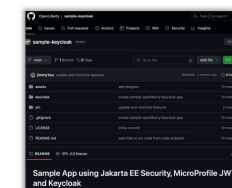 [skills: Technical writing, Communication]

https://github.com/sysflow-telemetry

Watch our OSSNA'23 talk to learn more about SysFlow!

https://youtu.be/v3yVtLwv5AA

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Open Source Program Office

Questions?

Website: ospo.cc.gatech.edu
Contact: **ospo-team@gatech.edu**