Johns Hopkins University - Open Source Programs Office 2024 Annual Report

2024 was another exciting year for the Johns Hopkins University Open Source Programs Office. We launched and executed the Free and Open Source Project Fund, increased the discoverability and reproducibility of open-source software on campus through resources and training programs, expanded use and engagement with code and collaboration tools such as GitHub Campus, and engaged in cross-institutional, collaborative efforts to build a thriving community of practice around academic open-source software.

Free and Open Source Project Fund

A major highlight of 2024 was the launch of the inaugural Free and Open Source Project Fund (FOSSProF), a grant program led by the OSPO and funded by the Alfred P. Sloan Foundation that provided over \$275,000 in direct support to nine open source projects across five academic divisions on campus. The projects ranged from tools for biosensor data analysis to software for reproducible economics research and precision medicine.

The program successfully met its goals of supporting campus open source practitioners and helping the OSPO continue its work to understand community needs. We learned that access to reliable development expertise is a key factor in project success, and that many projects benefit from guidance on software development practices, community building, and project management beyond just financial support. To ensure the successes of the Free and Open Source Project Fund can be replicated and scaled, the OSPO developed a comprehensive playbook documenting all aspects of the program.

In October, the OSPO hosted the <u>FOSSProF Summative Event</u>, which brought together all nine project teams to share their accomplishments, challenges, and insights. The event featured presentations from each team, talks from open source experts, and opportunities for networking and community building.

Training and Strategic Support

The OSPO continues to serve as the hub for open source at Hopkins, expanding our educational offerings and consulting services to meet campus needs, and improving our website to make all resources easier to find and engage with. This year, we launched the OSPO Explainer series, a collection of bite-sized tutorial videos tackling a variety of open source essentials. New Explainers are posted monthly, and cover topics such as open source licensing, software citations, and persistent identifiers.

We also worked with our colleagues at Johns Hopkins Technology Ventures (JHTV) to create a <u>comprehensive licensing guide</u> for faculty, researchers, and students. This resource provides guidance for choosing a license for an open source software project, information about related legal protections such as patents and copyright, and an overview of open source hardware licenses. We also partnered with Data Services in the Sheridan Libraries to develop and deliver classes on software management plans and licensing for both software and data.

Another significant achievement was the launch of the <u>Open Source Project Catalog</u>, a continuously growing collection of open source projects developed by or contributed to by Hopkins faculty, staff, and students. The catalog, which was initially seeded by the successful FOSSProF projects, has already doubled in size since its summer launch and serves as both a showcase of Hopkins' open source contributions and a collaboration tool for campus developers.

The OSPO's one-on-one consulting work with open source projects on campus expanded in 2024. We worked with SciServer to create a value proposition for big data users on campus, helping them articulate their benefits and identify new campus use cases. We held strategy sessions with the OceanSpy and Econ-Ark projects, collaborating on frameworks for long-term sustainability of their projects. We also worked with PrecisionDM to develop a plan for community-led governance, helping them remain responsive to stakeholder needs as they expand beyond Hopkins.

Code and Collaboration Tools

The OSPO ended 2024 with over 1200 campus users in our <u>GitHub Campus</u> accounts, a 50% increase since the end of 2023. We continue to reach out to bring new users into the enterprise, encouraging labs, administrative units, and solo users to migrate their existing repositories to our shared system. Several faculty members are taking advantage of GitHub Classroom for teaching, and benefitting from integrations with campus tools like Canvas to streamline their workflows.

In summer 2024, the OSPO brought on graduate student Hardik Shah to help develop metrics and analysis tools for GitHub Campus. Shah created scripts and tools to identify publicly available repositories in the Enterprise, allowing us to identify repositories lacking licenses, READMEs, citations, and persistent identifiers, and proactively provide guidance to those users around open source best practices.

Academic Open Source Community of Practice

Throughout 2024, we actively contributed to the growing community of academic open source practitioners. As engaged members of CURIOSS, the Community for University and Research Institution OSPOs, we attended their semi-annual meetings and contributed patterns to their <u>repository of shared best practices</u>. These collaborations allow us to both learn from and share our experiences with other university OSPOs, creating a multiplier effect for our work.

We've also strengthened ties between open source and technology transfer through a monthly call with technology transfer officers and OSPO representatives, in partnership with JHTV. This collaborative approach culminated in a presentation by OSPO Program Manager Megan Forbes at the fall AUTM software course on open source, where we shared insights on balancing commercialization with open source principles. Additionally, OSPO Director Bill Branan presented on the <u>evolution and impact of university OSPOs</u> at the Coalition for Networked Information (CNI) fall meeting in 2024, helping to spread awareness of this emerging support structure in academia.