HEMI ATOMIC Workshops

Spring 2022

The HEMI Advanced Training On Methods In Computing (ATOMIC) Workshops will guide you through the vast world of computational concepts, tools, and best practices to enhance your effectiveness as a researcher. Each module:

- Runs for four weeks, building on those that come before
- Meets on Mondays 1:00pm to 4:00pm in Malone G33/35 (and remotely as necessary)
- Splits time between lecture and guided exercises
- Requires no outside effort

OBTAIN A HEMI ATOMIC CERTIFICATION for each module by attending all four weeks and completing the in-session deliverables.

LEARN MORE AND REGISTER TO ATTEND at https://github.com/JHU-HEMI/atomic-workshops

Module 1: Computing Basics

Build a working understanding of how to write computer code to solve general problems in your work.

- **Week 1 – 2022/01/24:** Introduction to Python 1
- **Week 2 – 2022/01/31:** Introduction to Python 2
- **Week 3 – 2022/02/07:** Version control (Git) and data management basics
- **Week 4 – 2022/02/14:** Cumulative application project

Module 2: Research Computing Basics

Develop familiarity with research computing concepts and tools.

- **Week 1 – 2022/02/21:** Introduction to Linux
- **Week 2 – 2022/02/28:** Python for research
- **Week 3 – 2022/03/07:** Software compilation
- **Week 4 – 2022/03/14:** Cumulative application project

Module 3: Software Engineering Basics

Learn to design, build, and share software within a collaborative environment.

- **Week 1 – 2022/03/28:** Software development best practices
- **Week 2 – 2022/04/04:** Collaborative software development
- **Week 3 – 2022/04/11:** Software packaging
- **Week 4 – 2022/04/18:** Cumulative application project

INSTRUCTOR The Workshops will be led by Dr. Adam Sierakowski, an Associate Research Scientist in HEMI with over 14 years of experience in software development for academic research applications. Adam has trained hundreds of students, staff, and faculty members across JHU to use computational tools more effectively in their research.