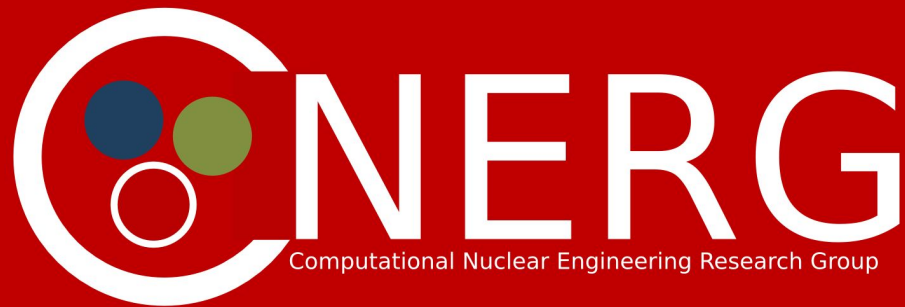


Community Driven Informal & Semiformal Education

The Hacker Within & The Carpentries



Motivation

- Develop a community and culture around compute-based scholarship that supports:
 - Quality
 - Reproducibility
- Respond to immediate interests and needs of community members
- Establish a baseline competency among a broad community of scholars

The Hacker Within

- Student organization
- Regular meetings to share skills and best practices in scientific computing
- Peers at all levels share topics of their choice
- Began at UW-Madison



The Carpentries



Teaching Basic Lab
Skills for Research
Computing



Building Communities
Teaching Universal Data
Literacy

The Carpentries (global)

- Coordination of two-day workshops
 - SWC: Over 500 workshops & 16,000 learners since 11/11
- Collaborative lesson development
 - 10 SWC lessons and 13 DC lessons
- Instructor training
 - combines literature in education with topical content
- Over 450 instructors

The Carpentries (local)

- History of leadership in Software Carpentry
 - First “modern” workshop organized by UW Hacker Within
 - First lessons based on that content (for many years)
 - Platinum partner
 - UW staff (Koch) currently serves on steering committee
- Up to 3 workshops in each Carpentry per year
 - SWC since 2013, DC since 2016
- Vibrant community of instructors
 - 9 ± 1 certified instructors, 29 community members
 - Self-organized
 - Succession: learners -> helpers -> instructors

Other Communities

- Opportunities exist to foster communities around specific topics
 - Individual software packages
 - Specific modes of analysis or computation

- Must be self-perpetuating but may require assistance in forming

DSHub can be a home for these
communities:

- Fostering their formation & growth
- Coordinating activities among them

