INCF/OCNS Software Working Group

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https://ocns.github.io/SoftwareWG/
https://github.com/OCNS/SoftwareWG/discussions

INCF Assembly 2021
April 19-29, 2021
Community, aims, and scope

- Community based working group open to everyone
- Default to open: all activities occur on public channels/platforms
- Members decide on projects to undertake
- Focus on any activities related to software used in Neuroscience research to aid their uptake and maintenance:
  - Dissemination of software tools
  - Training for users of specific software tools
  - General software development training
  - Dissemination and discussion of software development pipelines
  - Maintenance of software tools
  - Development of software tool communities
Current projects I: Dev sessions

- “Dev sessions” to discuss the development and maintenance of different software tools
  - Discuss and learn of different software development pipelines, tools, and infrastructure
  - Spread knowledge of software tool development in the research community
  - Enable communication and knowledge exchange between different software developer teams
  - Encourage more users to contribute to maintenance of software tools
- Phase 1 sessions: Brian Simulator, NeuroFedora, Neurolib, GeNN
- Phase 2 sessions (upcoming): NEURON, NetPyNE, PyNN, SciUnit, EBRAINS Validation Framework
- More information on Dev sessions here: https://ocns.github.io/SoftwareWG/category/events/
Current projects II: Software development guidelines

Living documentation on software development best practices for use as reference by the scientific community

- Appropriate for both daily software programming tasks, and larger scale software tool development
- Includes general software development guidelines
- Includes programming language specific notes and suggestions
- Divided into:
  - Must items: strongly recommended items
  - Should items: optional, but suggested items
- Currently work in progress at https://github.com/OCNS/SoftwareDevelopmentGuidelines
- Current version at: https://ocns.github.io/SoftwareDevelopmentGuidelines/
Join us!

- Introduce yourself to the community here: https://github.com/OCNS/SoftwareWG/discussions/12

- Develop software tools for neuroscience? Discuss their development at a Dev session! File a ticket here and we’ll set it up! https://github.com/OCNS/SoftwareWG/issues/new

- Contribute to the software development guidelines here: https://github.com/OCNS/SoftwareDevelopmentGuidelines

- Other interests: suggest a new task/project here: https://github.com/OCNS/SoftwareWG/discussions

The community is open to everyone. Help us learn and improve together!
Data dump:

Homepage: https://ocns.github.io/SoftwareWG/
GitHub: https://github.com/OCNS/SoftwareWG

Currently 20 members/participants

Initial discussions for this WG started in July 2020 on INCF NeuroStars
https://neurostars.org/t/ocns-infrastructure-software-tools-sig-meet-and-greet-initial-discussions/15560

First WG Meeting on 26 January 2021.
Minutes of the meeting: https://ocns.github.io/SoftwareWG/2021/02/07/wg-meeting-26-january-2021.html

Dev sessions to date:
  - Brian2 (Marcel Stimberg) - February 11, 2021
  - NeuroFedora (Ankur Sinha) - February 16, 2021
  - Neurolib (Caglar Cakan) - February 23, 2021
  - GeNN (James Knight, Thomas Nowotny) - March 9, 2021

Upcoming dev sessions:
  - NEURON
  - NetPyNE
  - PyNN
  - SciUnit
  - EBRAINS Validation Framework