

INCF/OCNS Software Working Group

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<https://ocns.github.io/SoftwareWG/>

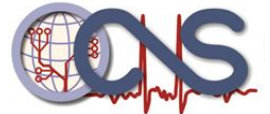
<https://github.com/OCNS/SoftwareWG/discussions>

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