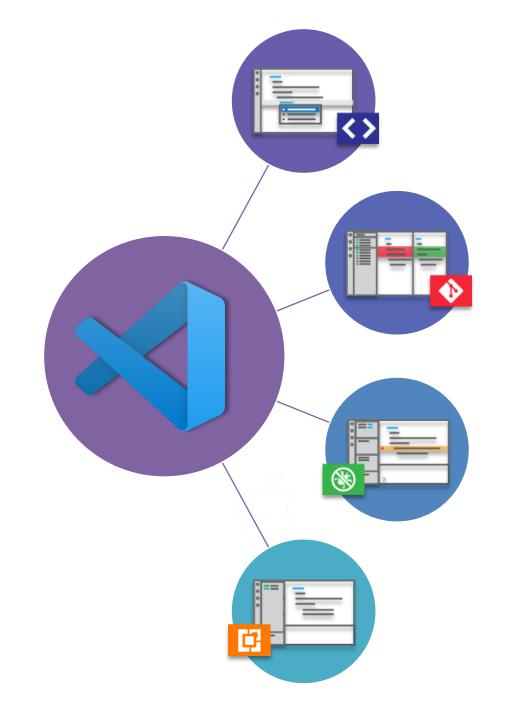
# Remote Development on HPC Clusters with VSCode – Part II

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Configuring SSH agent and config file

Version controlling with external repositories

Adding makefile and CMake support

Remote debugging on compute nodes using the proxy jump method

- https://youtu.be/u9k6HikDyqk
- https://github.com/sharcnet/vscode-hpc





# Remote debugging using the SSH tunnelling method

Remote debugging of CUDA codes using Nsight Visual Studio Code Edition



#### Remote Development on HPC Clusters

## Login Nodes

Debugging may put stress on the login nodes

Debugging CUDA codes is not possible

Packages must be loaded using

### Compute Nodes

#### SSH Proxy Jump (AKA Jump Hosts)

- Requires adding your public key to~/.ssh/authorized\_keys on each cluster
- Packages must be loaded using ~/.bashrc

#### SSH Tunneling (AKA Port Forwarding)

- Some VSCode extensions are not available
- Your development environment must be set up on each cluster individually



#### Let's Cook!

