CodeRefinery workshop in Espoo, Finland

A key aspect of the CodeRefinery project (<http://coderefinery.org/>), which was launched last autumn, is to train Nordic research groups to take full advantage of state-of-the-art tools and practices for modern collaborative scientific software development. The CodeRefinery training takes place in the form of interactive three-day workshops involving demonstrations, live coding exercises and type-along types of presentations. The very first CodeRefinery workshop was held in Espoo, Finland, on the 14th-16th of December 2016 in the headquarters of the CSC IT Center for Science. The 24 participants, most of whom were PhD students or postdoctoral researchers, came from various scientific disciplines ranging from mathematics and computer science to the physical and biological sciences, engineering and psychology. Their programming background was similarly diverse: some had extensive experience of software development in C, C++ or Fortran, others were Python or R aficionados, and yet others had less prior coding experience. However they all shared a keen interest in improving their coding practices and learning to use modern software development tools.

And this is exactly the aim of the CodeRefinery project: helping resarchers to write modular, reusable, maintainable, sustainable, reproducible and robust software, regardless of their academic discipline or preferred programming language. The workshop in Espoo covered collaborative distributed version control, automated testing, code documentation, DevOps, Jupyter Notebooks, CMake, integrated development environments and how to manage code complexity. In most sessions, demonstrations by the teacher were interspersed with tasks to be solved by the students and, after each session, students were encouraged to give feedback using sticky notes on what went well and what could be improved. Overall, the feedback was highly positive - clearly, the core topics covered by CodeRefinery workshops are in high demand by researchers who develop scientific software in their daily work, but may not have received formal training in using modern tools.

The CodeRefinery project will continue to deliver 3-day interactive workshops over the coming years. The next up is in Stockholm on the 20th-22nd of February, followed by Copenhagen on the 9th-11th of May and Tromsø some time in June. In tandem with delivering these workshops, the project will organize half-day or one-day events focusing on either training in one particular topic (as in the 2017 NeIC conference, <http://neic2017.nordforsk.org/>) or on general seminars and discussions (as in the April research computing training week in Oslo, <http://www.uio.no/english/services/it/research/events/coderefinery-2017-april.html>).

Anyone interested in attending any of the CodeRefinery events can get the latest news on the project’s website, <http://coderefinery.org/>, or follow @coderefine on Twitter. Furthermore, CodeRefinery recently launched a web forum where researchers from Nordic universities and research centers can ask questions and take part in discussions on software development topics. To join this forum, visit https://groups.google.com/group/coderefinery.