

Oct 10, 2024 |

📅 SEA Seminar and Discussion: Developer Exchange Programs

Attendees:

- Kyle Shores
- Ward Fisher
- Brian Vanderwende / Cisl / HPCD / @vanderwb
- Sheri Voelz / Cisl / TDD @mickelso
- Michael Waxmonsky / CGD/Cisl
- Helen Kershaw /TDD/Cisl
- Haiying Xu /TDD/Cisl @haiyingx
- Sam Rabin / CGD / TSS / @samsrabin
- Janine Aquino / EOL / RAF
- Marlee Smith /TDD/Cisl @masmith

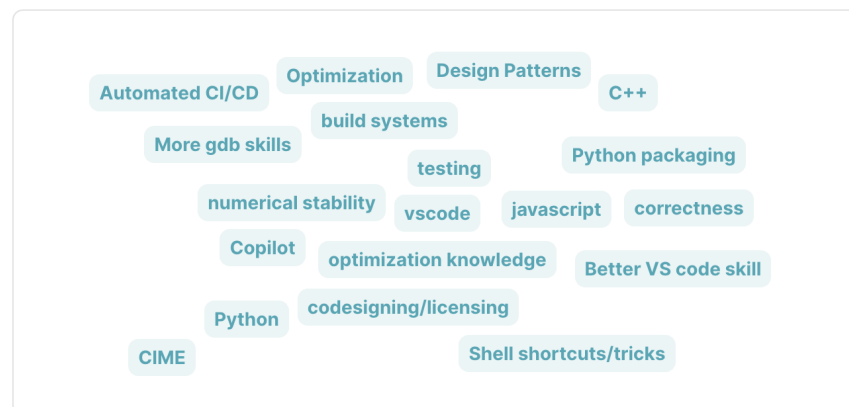
Resources of Interest

- Slido for the talk: **#5310204**
- Link to slides:
https://docs.google.com/presentation/d/1_fYq1yPqVx8seOZ_8vhZsOR_i1Di4foVi-IDiAo-mQ8/edit#slide=id.g30981570d04_0_40

Notes

- Miscellaneous announcements:
 - US-RSE meeting next week
 - ISS Conference planning meeting on Oct 22nd at 3 pm MT
 - Email Brian (vanderwb@ucar.edu) if you may be interested in helping with this year's conference
- Presentation notes:
 - Shared need across UCAR/NCAR to access expertise of colleagues

What tool is missing from your technical toolbox? Fortran, build systems, automation, engineering best practices, etc.



- Constraints: time! Learn from our colleagues to save time.
 - Needs of projects may not be aligned with current skills of the team, but can be aligned with others in the org.
- How much time do they feel they saved vs how much they spent time but learned a lot that will help later?
 - Immeasurable gain vs almost no time lost.
- What skills do you need in your project the most?
 - Build systems
 - Machine learning
 - Python
 - Security certificates
- Questions we had to answer
 - Would supervisors buy in?
 - Would we need account keys?
- Spent 3 mos at 20%. No problem with buy-in
- Can you say again how funding worked? Did you charge your normal accounts since it was equal time? Or did Kyle charge to a Unidata account?
 - Didn't bother with funding moving around (but did have approval from supervisors)
 - Pitched this arrangement to associate directors
- They were able to document clear outcomes and direct impacts for the projects they worked on (key for keeping the program going in the future)
- Indirect impacts:
 - breaking down silos
 - expanding pool of resources
 - expand professional networks both inside and outside NSF NCAR/UCAR
 - natural sharing of opportunities
- If you need AI help, ask Thomas Martin 😊

What is a professional organization or resource you use and would want your colleagues across the NCAR/UCAR organization to know about?

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- - RMACC

- [Campus Research Computing Consortium \(CaRCC\)](#)
- Lessons learned:
 - Flexibility is required
 - Hard start/end points are a must; this must be an obligation
 - Avoid “when I have the time” - does not work
 - Time spend is more than repaid vs what would have spent if working alone on something new
 - Was a LOT of fun
- Vision
 - Hope to move forward without the overhead of account keys or overly-burdensome administrative overhead
 - Not a formal program, or a form of intra-org “contract work”
- Question: How to get past grassroots effort without administrative overhead/burden?
 - There does need to be some administration
- Goals:
 - Upskill developers
 - Share and refine best practices
 - Proliferation of institutional knowledge
 - Reduce ramp up time on project
 - Promote collaboration and build professional networks
 - Improve the science
- Didn't have to learn a new skill; shared the skills they already have.
- Didn't have to do any training. Learned a lot by watching each other.
- Next steps:
 - Figure out what administration is required for a formal developer exchange program:
 - Tracking organizational opportunities
 - Keeping track of exchanges in progress
 - Figuring out how we track successes
 - Kyle and Ward are meeting with Jaci
 - Want to know if this is of interest to SEA community
- Question: Have you thought about a contract-money pathway within this potential program? This could help in soft money situations where funding is a challenge.
 - Feel happier keeping money out of this and keeping it a peer network in the short term.
- Discussion notes:
 - Jaci and Janine are on exploratory committee for cross-training program
 - Jaci: devil's advocate questions
 - What if there isn't a 1-to-1 exchange?
 - Ward: if someone asks for help and can't reciprocate, that's okay but wouldn't be a part of this program
 - Money

- Waited to present this idea until there was something that demonstrably worked
 - Concerned about SE II vs SE IV and how that would account for time exchange, but wasn't a concern with ADs for Kyle and Ward
- Ward & Kyle would be advocates if you want to do an exchange and need support
- Accountability during an exchange
 - Status meeting at inflection points
 - Have some latitude to help out other projects because of open source nature and time constraints
 - Maybe have an offramp if things aren't working
- Doesn't need to be a 1-to-1 exchange
- Hope that the program in its final form allows us to stop wasting time learning things others can help us with in the org
- Any thoughts of expanding it beyond NCAR/UCAR?
 - With other national labs for example?
 - For example: MOM6 development and aligned projects
 - Could envision it being that, but getting it off the ground is heavier with that type of aspect.
- Have you thought about the maintenance of things that are developed as part of an exchange?
 - Know coming in that the dedicated work is short term, but hopefully it establishes a resource moving forward.
 - Ultimately the responsibility is on each side to maintain whatever they get from the other side
 - At its core, it's more about professional development and networking than a deliverable.