

P4 Education Workgroup

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Agenda

- **Introductions**
- **Workgroup Charter**
- **Plan for the upcoming year**
 - Tutorials
 - Courses
 - Educational materials
- **Widening participation**
- **Engagement interfaces**
- **Ideas and comments**



Introductions

Who are you?

- **Name**
- **Affiliation**
- **Teaching / research area**
- **P4 teaching experience**
- **Plans for using P4 in education**



Charter

- This working group is organized to promote the education of P4.
- Its main tasks will include:
 - Hosting and curating of shared community resources
 - Development of instructional materials
 - Organization of educational events.



Tutorials

- **P4 Online tutorial**
- **P4 Full day tutorial**
 - Last revised: Aug/18 (SIGCOMM)
 - Built from a set of short (60-90 minutes) modules
 - Introduction, P4 runtime, exercises etc.
- **P4-NetFPGA tutorial**
 - Online tutorial
 - Half day tutorial
- **Others?**



Courses

- **Already running:**
 - Stanford CS344 (Spring 2018) – Build an Internet router
 - ETH (Fall 2018) - Advanced Topics in Communication Networks
- **Upcoming**
 - Cambridge P51 (Lent 2019) – High performance networking
 - Lugano (Spring 2019)
 - Cornell
- **Others**
 - ?
- **Goal**
 - Share courses materials (applies to **most** of the above)



Educational materials

- **Getting started**

- Audience: researchers new to P4 (e.g. PG students)
- Also part of the teaching materials
- A collection of useful pointers
- All you really need to know to install and run P4 in different environments
- Wiki

- **Other ideas?**



Widening participation

- **P4.org events outside the US**
 - E.g. tutorial in Budapest (SIGCOMM18), 1st P4 European workshop
- **Reaching under-represented groups**
 - In the P4 European workshop: 94% men / 6% women
- **Pathways to increase engagement and reach wider audiences?**
 - Attract new audiences when P4 is still young and exciting!



Future Events

- **Tutorials and workshops**
 - Need to identify the right communities
 - So far focused on SIGCOMM
 - Planned: P4->NetFPGA in FPGA'19 (accepted)
- **Upcoming opportunities (outside the US)**
 - SIGCOMM 2019
 - FOSDEM 2019
 - ANCS 2019
 - NetSoft 2019
 - ?



Engagement Interfaces

- **Mailing list**
- **Wiki**
- **Slack**
 - Volunteers?
- **You can contribute by:**
 - Running a tutorial – get in touch!
 - Contributing materials
 - Contributing to the wiki



Ideas? Comments?

