

CDER - Center for Parallel and Distributed Computing Curriculum Development and Educational Resources

What should every Computer Science and Computer Engineering Student know about Parallel and Distributed Computing (PDC)?

NSF/IEEE-TCPP Curriculum Initiative on Parallel and Distributed Computing - Core Topics for Undergraduates

Areas

Programming, Architecture, & Algorithms
Version 1 – 2012

- Informed 2013 ACM/IEEE CS Curricula
- 200+ early adopters or instructor trainees

New Aspects

Big Data, Energy, Distributed Computing, Pervasive topics

Version 2-B – 2020

Current Activities

CS1/CS2 Exemplars NSF Project

Computer Engg. oriented TCPP Curriculum

Edu* Workshops – Upcoming

EduPar'24 @ IPDPS, **May 27**, San Francisco

EduHPC'24 @ SC, **Nov**, Atlanta

EduHiPC'24 @ HiPC, **Dec**, India

JPDC Special Issues

Keeping up with Technology: Teaching Parallel, Distributed and High-Performance Computing (2017, 2019, 2021)

Paper Submission deadline
May 31, 2024

CDER RESOURCES

Call for Applications - Seeking NSF-funded Testing Teams for CS1/CS2 course exemplars

\$21K Stipend/team

See back page for details

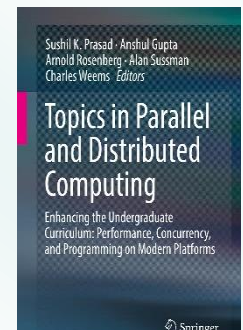
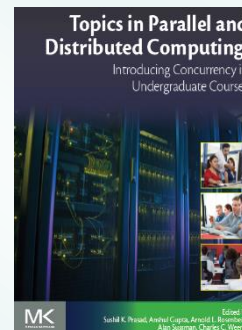
Application deadline
March 31, 2024

NSF CDER Instructor Training Workshop

July 29 - Aug 2, 2023 @ UMass (tentative)

CDER Book series

Free 50K+ chapter downloads



Upcoming CFP - CDER Book 3rd Volume

On experience of Adopters - Exemplars + Resources on courses and topics

CDER Courseware Website

Search & Upload Course Material



Public Feedback on TCPP Curriculum & Contact
sushil.prasad@gmail.com





Call for Applications



Seeking NSF-funded Testing Teams for CS1/CS2 course exemplars

Application Deadline
March 31, 2024

NSF CyberTraining award (#2321015)

Why Should a Faculty Member Participate?

By joining our project as a *Testing Team*, you'll enjoy the following benefits:

- Be a Trailblazer
- Enhance Your Expertise through Collaboration
- Receive Recognition, publish jointly
- Competitive Compensation

Testing Team Responsibilities:

- Collaborating with one of the two *Development Teams*, online weekly design meetings.
- Attend in-person summer training sessions with the *Development Teams* (late July).
- Modify given course exemplars to fit your institution and courses.
- Teach your CS1 & CS2 courses with course exemplars.
- Evaluate the effectiveness of new materials, technologies, and teaching methods using provided evaluation tools.
- Provide feedback to improve the overall effort.
- Share your experiences and insights with the team and the wider community.

\$21K

Stipend/team

3-year partnership

**Must be US-based
Institution**

Apply now



CDER Events at SIGCSE'24

CDER Booth #210

Thu-Sat March 21-23, 2024

Special Sessions Thursday and Friday 1:30 pm – 2:30 pm

Presentations on

Unplugged activities

Peachy assignment

PDC curriculum

TCPP Curriculum Feedback Survey

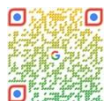
Architecture
Area



Programming
Area



Algorithms
Area



Aspects of Big Data,
Energy and Distributed



Training Workshop

(#108)

Wed 20 Mar 2024

7:00 pm - 10:00 pm

at

Meeting Room E145

Integrating Parallel
and Distributed
Computing in Early
Computing Classes