INNOVATIONS AND OPPORTUNITIES IN LIBERAL ARTS COMPUTING EDUCATION

WEDNESDAY, FEBRUARY 26TH, 9:00 AM - 5:00 PM
ROOMS 302-303, DAVID L. LAWRENCE CONVENTION CENTER
SIGCSE TECHNICAL SYMPOSIUM 2025

AGENDA AND MATERIALS:
https://computing-in-the-liberal-arts.github.io/SIGCSE2025-Affiliated-Event/

LIBERAL ARTS AFFILIATED EVENT FACILITATORS

Jakob Barnard - University of Jamestown
Grant Braught - Dickinson College
Janet Davis - Whitman College
Matthew Ferland - Dickinson College
Olive Franzese - Northwestern University
Amanda Holland-Minkley - Washington & Jefferson College
Karl Schmitt - Trinity Christian College
Andrea Tartaro - Furman University
James Teresco - Siena College

MORNING AGENDA (9:00-12:15)

9:00-9:15	Welcome and Preview of Day's Events
9:15-9:30	CS2023 Curriculum Design Process Update
9:30-10:10	Curricular Innovations *Re-envisioning the CS Major at Whitman College* *Designing an Interdisciplinary Data Science Minor*
10:10-10:30	Break
10:30-11:10	Instructional Innovations *From Java to Python: Revamping CS2 for a Cohesive Curriculum* *But *How* Do They Use It? Scaffolding the Introduction of Generative AI Across the SLAC Curriculum*
11:15-11:45	Breakout Discussions
11:45-12:15	Soliciting Committee Priorities and Unconference Topics
12:15-2:00	Lunch Break

AFTERNOON AGENDA (2:00-5:00)

2:00-2:30	Selection of Unconference Sessions *Preliminary list of topics linked in online event agenda* *Event organizers will continue to accept session proposals through the lunch break, contact Jakob Barnard or Amanda Holland-Minkley*
2:30-4:30	Unconference Sessions
4:30-5:00	Debrief and Open Discussion

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OTHER COMMITTEE SIGCSE TS ACTIVITIES

Thursday, 6:30-7:20 PM
Meeting Room 325
Birds of a Feather Flock 2c
Computing Education in Liberal Arts Colleges

Friday, 12:45-1:35 PM
Meeting Room 406
Birds of a Feather Flock 3g
Towards a Computer Science Curriculum "Microkernel"

CS2023 CURRICULUM DESIGN PROCESS UPDATE

A Workbook for Distinctive Computer Science Curricula: Designing Programs Aligned with Liberal Arts Institutional and Departmental Identity

- Includes supplemental *CS2023 Curriculum Design Worksheet* and companion lab activity
- Afternoon unconference session available for this lab activity

Expanded version of supporting publication *Computer Science Curriculum Guidelines: A New Liberal Arts Perspective* forthcoming in Spring Inroads

Funding (NSF #2342587): *Workshops Supporting the Development of a Workbook for Distinctive Computing Programs Aligned with Liberal Arts Institutional and Departmental Identity*

- Supported workshops/tutorials for feedback and dissemination
- Development of on-site facilitation program piloted Summer 2024
- Funding still available for one or more Summer 2025 site visits
- Additional NSF IUSE proposal in submission

All materials available on Committee CS2023 page:

- https://computing-in-the-liberal-arts.github.io/CS2023/

CURRICULUM INNOVATIONS

Re-envisioning the Computer Science Major at Whitman College

William Bares, Janet Davis, John Stratton, Jordan Wirfs-Brock

Whitman College

Designing an Interdisciplinary Data Science Minor

John Ladd, Rebecca Rapp

Washington & Jefferson College

BREAK

10:10-10:30	Break
10:30-11:10	Instructional Innovations *From Java to Python: Revamping CS2 for a Cohesive Curriculum* *But *How* Do They Use It? Scaffolding the Introduction of Generative AI Across the SLAC Curriculum*
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INSTRUCTIONAL INNOVATIONS

From Java to Python: Revamping CS2 for a Cohesive Curriculum

Proyash Podder, Hamed Yaghoobian
Muhlenberg College

But *How* Do They Use It? Scaffolding the Introduction of Generative AI Across the SLAC Curriculum

Carolyn Jane Anderson, Molly Q Feldman
Wellesley College, Oberlin College

BREAKOUT DISCUSSIONS

TABLE A:
Re-envisioning the Computer Science Major at Whitman College

TABLE B:
Designing an Interdisciplinary Data Science Minor

TABLE C:
From Java to Python: Revamping CS2 for a Cohesive Curriculum

TABLE D:
*But *How* Do They Use It? Scaffolding the Introduction of Generative AI Across the SLAC Curriculum*

TABLE E,F:
Connect with Colleagues

SOLICITING COMMITTEE PRIORITIES AND UNCONFERENCE TOPICS

What opportunities and challenges do you see for liberal arts CS programs in the coming years?

What types of information sharing would you like to see between liberal arts CS programs?

What projects might benefit from collaboration between liberal arts CS educators?

What issues facing CS educators require particular advocacy on behalf of those in the liberal arts?

How can the Committee help provide organization or support?

How might we use afternoon unconference sessions to begin this work?

LUNCH BREAK (12:15-2:00)

2:00-2:30	Selection of Unconference Sessions *Preliminary list of topics linked in online event agenda* *Event organizers will continue to accept session proposals through the lunch break, contact Jakob Barnard or Amanda Holland-Minkley*
2:30-4:30	Unconference Sessions
4:30-5:00	Debrief and Open Discussion

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UNCONFERENCE SESSION TOPICS:
https://docs.google.com/document/d/1OtyQzXVxWzZsPerdMZucCCEtQvLSnyeX8tsiCOMYh1A/edit?usp=sharing

COMMITTEE PRIORITIES SURVEY:
https://washjeff.qualtrics.com/jfe/form/SV_5AYB42gFLqjtMLc

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SELECTION OF UNCONFERENCE SESSIONS

TABLE A: An invitation to collaborate on a textbook for CS1 and/or 2, Jessen Havill
TABLE B: Identifying a computer science “microkernel”, Janet Davis
TABLE C: Exploring the CS2023 Spreadsheet Tool, Jim Teresco
TABLE D:
TABLE E:
TABLE F:
TABLE G:
TABLE H:
…

PROPOSED SESSION TOPICS:
https://docs.google.com/document/d/1OtyQzXVxWzZsPerdMZucCCEtQvLSnyeX8tsiCOMYh1A/edit?usp=sharing

DEBRIEF AND DISCUSSION

What were the primary results of your session?

What are your next steps and how might others get involved?

How can the Committee help move these conversations and projects forward?

Session Organizers: Remember to share a link to your work!

Everyone: Visit our committee site for info on joining our mailing list or to access resources from today's event!
https://computing-in-the-liberal-arts.github.io/

Join us Thursday at 6:30 for Flock 2c *Computing Education in Liberal Arts Colleges* and Friday at 12:45 at for Flock 3g *Towards a Computer Science Curriculum "Microkernel"*!

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