

Michael Schneider

Computer Science PhD

Department of Computer Science
University of Colorado Boulder

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Areas of Interest: Embedded Systems, Web Development, Developer Tools

Programming Languages: C++, Javascript/Typescript, R, Java, C#

Teaching Topics: Data Science, Software Engineering, Web Design & HCI

Education

Ph.D.	Computer Science	University of Colorado Boulder	2024 (Anticipated)
M.S.	Computer Science	East Tennessee State University	2015
B.S.	Computer Science	East Tennessee State University	2013

Research Experience

- *Educational Data Analyst*, ASSETT 2019-Present
Analyze & visualize classroom interactions, design undergraduate data science course materials
- *Graduate Research Assistant*, School Wide Labs & iSAT Summer 2022, 2023
Develop classroom resources and teacher PD on debugging & AI
- *Graduate Research Assistant*, Debugging by Design (NSF #1742081) Summer 2021
Design, develop, and evaluate e-textile debugging tools

Teaching/Work Experience

- *Graduate Assistant*. University of Colorado Boulder, 2018-Present
Software Development, Inclusive Interdisciplinary Data Science for All
- *Lecturer* Department of Computing, East Tennessee State University, 2015-2018
Object Oriented Programming (JAVA), Web Development (HTML/CSS), Discrete Mathematics, Assembly Language, and Arduino Programming.
- *Software Engineering Internships*: IBM (Summer 2013), CGI (Summer 2012)

Advisor

Dr. Tamara Sumner (2018 – Present)

Dr. Jay Jarman (2012 – 2015)

Awards, Funding, and Other Support

Ralph Slutz Excellence Award	2023
ICS Cognitive Science Graduate Certificate	2023
ICS Research Funds	2021-2023
Outstanding PhD Teaching Award (CU Boulder)	2019
Department Award for Outstanding Graduate Student (ETSU)	2015
Honors College (Undergraduate)	2008 - 2013

Publications (refereed)

- **Schneider, M.**, Nixon, J., Bhaduri, S., and Hennessy Elliot, C. (2024, June). Navigating Tensions within the Co-design Process to Generate Debugging Resources for Middle School STEM Classrooms. Proceedings of the 18th International Conference of the Learning Sciences-ICLS 2024. International Society of the Learning Sciences.
- Hennessy Elliott, C., Nixon, J., Gendreau Chakarov, A., **Schneider, M.**, and Srinjita Bhaduri, S. (June, 2024). It's not working!: Critical problems in emergent infrastructures of classroom physical computing. Proceedings of the 18th International Conference of the Learning Sciences-ICLS 2024. International Society of the Learning Sciences.
- **Schneider, M.** (2023, June). Designing scaffolds to support students in debugging e-textiles. In Proceedings of the 22nd Annual ACM Interaction Design and Children Conference (pp. 766-768). ***Doctoral Consortium***
- Hennessy Elliot, C., Nixon, J., **Schneider, M.**, Chakarov, A., Bush, J., & Recker, M. (***Under Review***). Characterizing teacher support of debugging with physical computing: Towards a debugging pedagogy. ACM Transactions on Computing Education (TOCE).
- **Schneider, M.** (2022, June). Scaffolding the Debugging Process in Physical Computing with Circuit Check. In Proceedings of the 15th International Conference on Computer-Supported Collaborative Learning-CSCL 2022, pp. 391-394. International Society of the Learning Sciences. ***Nominated for Best Paper***
- Hill, C., **Schneider, M.**, Eisenberg, A., & Gross, M. D. (2021, February). The threadboard: designing an e-textile rapid prototyping board. In Proceedings of the Fifteenth International Conference on Tangible, Embedded, and Embodied Interaction (pp. 1-7).

- **Schneider, M.** (2020, February). Pin Status: An Arduino Debugging Library for High School E-textile Courses. In SIGCSE '20: Proceedings of the 51st ACM Technical Symposium on Computer Science Education.
- **Schneider, M., Hill, C., Eisenberg, A., Gross, M., & Blum, A.** (2020, April). A Software Debugger for E-textiles and Arduino Microcontrollers. In Proceedings of the FabLearn 2020-9th Annual Conference on Maker Education (pp. 118-121).

Theses

- Schneider, Michael J. "A Study on the Efficacy of Sentiment Analysis in Author Attribution." (2015).
- Schneider, Michael. "Analysis of Features Composing an Automated Text Readability Formula." (2013).