Kelsey Fulton, Ph.D.

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Employment History

2023 – Present **Assistant Professor.** Department of Computer Science. Colorado School of Mines.

Education

2017 – 2023 **Ph.D. Computer Science, University of Maryland**
Thesis title: *Understanding and Improving Secure Development from a Human-Centered Perspective*

2017 – 2019 **M.Sc. Computer Science, University of Maryland**

2013 – 2017 **B.Sc. Computer Science and Mathematics, Millersville University of Pennsylnvania**

Peer-Reviewed Publications

Conference Proceedings

1. **K. R. Fulton**, J. Lewis, N. Malkin, and M. L. Mazurek, "Write, Read, or Fix? Exploring Alternative Methods for Secure Development Studies," in *Symposium on Usable Privacy and Security*, 2024. URL: https://www.usenix.org/conference/soups2024/presentation/fulton.
2. S. Katcher, L. Wang, C. Yang, *et al.*, "A Survey of Cybersecurity Professionals' Perceptions and Experiences of Safety and Belonging in the Community," in *Symposium on Usable Privacy and Security*, 2024. URL: https://www.usenix.org/conference/soups2024/presentation/katcher.
3. **K. R. Fulton**, S. Katcher, K. Song, *et al.*, "Vulnerability Discovery for All: Experiences of Marginalization in Vulnerability Discovery," in *IEEE Symposium on Security and Privacy*, 2023. URL: https://doi.ieeecomputersociety.org/10.1109/SP46215.2023.10179478.
4. **K. R. Fulton**, D. Votipka, D. Abrokwa, M. L. Mazurek, M. Hicks, and J. Parker, "Understanding the How and the Why: Exploring Secure Development Practices through a Course Competition," in *ACM SIGSAC Conference on Computer and Communications Security*, 2022. URL: https://dl.acm.org/doi/abs/10.1145/3548606.3560569.
5. **K. R. Fulton**, A. Chan, D. Votipka, M. Hicks, and M. L. Mazurek, "Benefits and Drawbacks of Adopting a Secure Programming Language: Rust as a Case Study," in *Symposium on Usable Privacy and Security*, 2021. URL: https://www.usenix.org/conference/soups2021/presentation/fulton.
6. D. Votipka, **K. R. Fulton**, J. Parker, M. Hou, M. L. Mazurek, and M. Hicks, "Understanding security mistakes developers make: Qualitative analysis from Build It, Break It, Fix It," in *USENIX Security Symposium*, 2020. URL: https://www.usenix.org/conference/usenixsecurity20/presentation/votipka-understanding, **Distinguished paper award winner**.
7. **K. R. Fulton**, R. Gelles, A. McKay, Y. Abdi, R. Roberts, and M. L. Mazurek, "The Effect of Entertainment Media on Mental Models of Computer Security," in *Symposium on Usable Privacy and Security*, 2019. URL: https://www.usenix.org/conference/soups2019/presentation/fulton.

Journals

1. J. Parker, M. Hicks, A. Ruef, *et al.*, "Build It, Break It, Fix It: Contesting Secure Development," *ACM Transactions on Privacy and Security*, vol. 23, no. 2, pp. 1–36, 2020. URL: https://dl.acm.org/doi/abs/10.1145/3383773.

Peer-Reviewed Workshops and Posters

1. J. Lewis and **K. R. Fulton**, *NERDS: A Non-invasive Environment for Remote Developer Studies*, 2024. URL: https://dl.acm.org/doi/10.1145/3675741.3675750.
2. **K. R. Fulton**, S. Katcher, K. Song, *et al.*, *Vulnerability Discovery for All: Experiences of Marginalization in Vulnerability Discovery*, 2022. URL: https://www.usenix.org/conference/soups2022/presentation/fulton-poster.
3. **K. R. Fulton**, D. Votipka, D. Abrokwa, M. L. Mazurek, M. Hicks, and J. Parker, *Understanding the How and the Why: Exploring Secure Development Practices through a Course Competition*, 2022. URL: https://www.usenix.org/conference/soups2022/presentation/fulton-poster-0.
4. **K. R. Fulton**, Y. Abdi, C. Neidhart, M. L. Mazurek, and M. Hicks, *Studying the Costs and Benefits of Rust, Compared to C*, 2019. URL: https://wsiw2019.sec.uni-hannover.de/downloads/Studying%20the%20Cost%20and%20Benefits%20of%20Rust%20Compared%20to%20C.pdf.
5. R. Gelles, **K. R. Fulton**, R. Walter, and D. Levin, *Detecting IoT Malware with Power Measurements*, 2018.

Awards and Honors

2024 **Distinguished Reviewer Award**, USENIX Security
2023 **Noteworthy Reviewer Award**, USENIX Security
John Karat Usable Security and Privacy Student Research Award
2020 **Distinguished Paper Award**, USENIX Security
2016 **Student of Academic Distinction**, Millersville University of Pennsylvania

Service

Organizing Committee

2025 **Workshops Co-Chair**, Symposium on Usable Privacy and Security (SOUPS)
2024 **Workshops Co-Chair**, Symposium on Usable Privacy and Security (SOUPS)
2023 **Workshops Junior Co-Chair**, Symposium on Usable Privacy and Security (SOUPS)
2022 **Posters Junior Co-Chair**, Symposium on Usable Privacy and Security (SOUPS)

Program Committee

2026 IEEE Security & Privacy
2025 IEEE ConPro
USENIX Security
IEEE Security & Privacy
2024 USENIX Security
IEEE Security & Privacy
IEEE ConPro
2023 USENIX Security
NDSS

Service (continued)

2022 ACM CCS
IEEE ConPro
2021 ACM CCS
IEEE ConPro

External Reviews

2025 ACM CHI
2024 ACM CHI
ACM CSCW
2023 ACM CHI
2022 PoPETS
2021 ACM CHI
ACM TOPS
HFES
2020 COSE
ACM CHI Late Breaking Works

Research Mentoring

Graduate

2024 – Present **Jack Kingham**
PhD Computer Science, Colorado School of Mines

Katy Limes
PhD Computer Science, Colorado School of Mines

Kelly Fisher
PhD Computer Science, Colorado School of Mines

Undergraduate

Spring 2025 – Present **Caroline Schreier**
B.Sc. Computer science, Colorado School of Mines

Fall 2024 – Present **Brinda Malik**
B.Sc. Computer science, Colorado School of Mines

Spring 2024 – Present **Morgan Steele**
B.Sc. Computer science, Colorado School of Mines

Spring 2024 – Fall 2024 **Christine Worley**
B.Sc. Mathematics, Colorado School of Mines

Fall 2023 – Summer 2024 **Max Ketter**
B.Sc. Computer science, Colorado School of Mines

2021 – 2024 **Joe Lewis**
B.Sc. Computer science, University of Maryland

High School

Summer 2024 – Present **Riley Herchert**
Silver Creek High School