

Jacob McAuley Penney

Northern Arizona University (NAU)
School of Informatics, Computing, and Cyber
Systems

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<https://mcauley-penney.github.io>

1. Overview

1.1. Academic Positions

2025-present **Northern Arizona University (NAU), USA**
Temporary Part-Time Instructor, School of Informatics, Computing, and
Cyber Systems

1.2. Academic Degrees

2024 **M.Sc. in Computer Science**
Northern Arizona University
Thesis title: *“Assessing and Designing LLM-Based Conversational Agents for
Introductory Computer Science Education”*

2023 **B.S. in Applied Computer Science**
Northern Arizona University

2023 **B.A. in Comparative Cultural Studies**
Northern Arizona University
Emphasis in Religious Studies

2. Scholarly Activities

2.1. Publications

Type of publication	Total
Journal	1
Book Chapters	0
Conference Full Paper	4
Conference Short Paper/Workshop	1
Edited Work	0
Other	0
TOTAL	6

2.1.1. Referred Journal Publications (1)

- J.1 2023 Fabio Santos, Joseph Vargovich, Bianca Trinkenreich, Italo Santos, Jacob Penney, Ricardo Britto, João Felipe Pimentel, Igor Wiese, Igor Steinmacher, Anita Sarma, Marco A. Gerosa. Tag that issue: Applying API-domain labels in issue tracking systems, Empirical Software Engineering (ESEM 2023). <https://doi.org/10.1007/s10664-023-10329-4>.

2.1.2. Referred Full-Length Paper Proceedings Publications (4)

- C.4 2024 Igor Steinmacher, Jacob McAuley Penney, Katia Romero Felizardo, Alessandro F. Garcia, Marco A. Gerosa. "Can ChatGPT emulate humans in software engineering surveys?", 18th ACM/IEEE International Symposium on Empirical Software Engineering and Measurement (ESEM 2024). <https://doi.org/10.1145/3674805.3690744>.
- C.3 2023 Penney, J., Pimentel, J.F., Steinmacher, I., Gerosa, M.A., "Anticipating User Needs: Insights from Design Fiction on Conversational Agents for Computational Thinking", 7th International Workshop on Chatbot Research (Conversations 2023). https://doi.org/10.1007/978-3-031-54975-5_12. [Best paper award]
- C.2 Fabio Santos, Jacob Penney, João Felipe Pimentel, Igor Wiese, Igor Steinmacher, Marco A. Gerosa. Tell Me Who Are You Talking to and I Will Tell You What Issues Need Your Skills, International Conference on Mining Software Repositories (MSR 2023). <https://doi.org/10.1109/MSR59073.2023.00087>.
- C.1 Joseph Vargovich, Fabio Santos, Jacob Penney, Marco A. Gerosa, Igor Steinmacher. GiveMeLabeledIssues: An Open Source Issue Recommendation System, International Conference on Mining Software Repositories (MSR 2023). <https://doi.org/10.1109/MSR59073.2023.00061>.

2.1.3. Referred Short-Paper Conference/Workshop Publications (1)

- S.2 2025 Carter, B.C., Contreras, J.R., Llanes, C.A., Acharya, P., Utzerath, J., Farner, A.O., Jenkins, H., Johnson, D., Penney, J., Steinmacher, I., Gerosa, M.A., Santos, F., "A Tool to Predict Fine-Grained Skills Needed to Solve Issues on GitHub", The 4th Intl. Workshop on NL-based Software Engineering (NLBSE 2025).

2.2. Undergraduate Courses Taught

NORTHERN ARIZONA UNIVERSITY, USA

CS 399	Applied Generative AI in Software Engineering	2025 to Present (1x)	30 students (full)
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TOTAL	1 different courses	1 sessions	30 students
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3. Service to the Profession

3.1. Member in Program Committees

2025 **CompEd** - ACM Global Computing Education Conference

2025 **ITiCSE** - Innovation and Technology in Computer Science Education

2024 **Conversations** - International Workshop on Chatbot Research and Design

4. Awards and Honors

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|---|-----------|--|------|
| 3 | Scholarly | Nomination for the 2024 Research and Creative Activity (RCA) Most Promising Graduate Student Researcher award, Northern Arizona University | 2024 |
| 2 | Scholarly | Best paper award at the 7 th International Workshop on Chatbot Research (Conversations 2023) | 2023 |
| 1 | Scholarly | Outstanding Senior in Applied Computer Science , Northern Arizona University | 2023 |

5. Additional information

Personal website: <https://mcauley-penney.github.io>

Google Scholar: <https://scholar.google.com/citations?user=4maC0rUAAAAJ&hl=en&oi=ao>

DBLP: <https://dblp.org/pid/344/0963.html>

ACM DL: <https://dl.acm.org/profile/99661027587>

LinkedIn: <https://www.linkedin.com/in/jacob-m-penney>

GitHub: <https://github.com/mcauley-penney>