# Kaia Newman

Email: kaian@umich.edu LinkedIn: kaia-newman

Interested in research at the intersection of **neurodivergent accessibility**, **cognition**, and **computing education** in **software engineering**. Currently applying to Ph.D. programs in the US to start Fall 2023.

# EDUCATION

## University of Michigan

Ann Arbor, Michigan

B.S. in Computer Science – College of Literature, Science, and the Arts

Sept. 2018 -May 2023 (expected)

- Minor in Music
- GPA: 3.3/4.0

# PEER REVIEWED PUBLICATIONS

[1] **K. Newman**, M. Endres, W. Weimer, and B. Johnson, "From Organizations to Individuals: Psychoactive Substance Use By Professional Programmers", in 2023 International Conference on Software Engineering, full paper, 26% acceptance rate, May 2023.

# Research Experience

#### University of Michigan

Ann Arbor, Michigan Jan. 2022–Present

Computer Science Research Assistant

- Studied the impacts of psychoactive substance use by professional programmers (under Dr. Westley Weimer)

- Resulted in a paper where I was the first author, accepted to ICSE 2023
- Conducted 25 semi-structured, hour-long interviews with developers
- Open-coded and analyzed over 160,000 words of text using a double-pass method
- Helped write approved IRB protocol
- Contributed to final paper text and figures, especially in the experimental design, analysis, and background literature sections
- Currently working on second paper on program comprehension/medical imaging

#### University of Michigan

Ann Arbor, Michigan Oct. 2018–Feb. 2019

Ornithology Research Assistant

 Assisted in bio-geographical study on functional wing traits of birds, including physical measurements (e.g., Hand-Wing Index), data analysis, and related work (under Dr. Benjamin Winger)

# WORK EXPERIENCE

## Michigan Publishing

Ann Arbor, Michigan June 2018-Aug. 2020

Library Assistant

- Did quality assurance on the metadata of 1500+ UMich e-books that were transferred to a new platform
- Formatted documents and did citation cleanup with Microsoft templating as well as a template specific to MPub
- Completed other various tasks using Excel, PuTTY, WinSCP, physical library inventory/barcodes, Adobe Acrobat Reader, etc.

# LEADERSHIP EXPERIENCE

- Inter-Cooperative Council at Ann Arbor

  Sept. 2020—Current

  Elected as house president of a house of 20 for the Fall/Winter 2021-2022 and 2022-2023 (expected) terms. In this
  role, I ran and took minutes for 20+ democratic meetings, came up with and enforced safety protocols for residents
  regarding COVID-19 (no cases for 2 years), gave dozens of house tours, communicated between staff and residents,
  creatively recruited for and advertised the organization, and mediated for resident conflicts. Also served as "work
  manager" and "food steward" for one term each.
- University of Michigan Marching Band 2018–2020 Marched and played piccolo as a 20 hr/week time commitment. Competed biweekly to make shows based on musical and physical aptitude, as well as professionalism, to perform in front of 110,000 people at football games. Memorized movements for parades and 70+ songs.
- Volunteer Research at Great Gull Island

  Stayed one week on-island monitoring and collecting data on the largest concentration of nesting terns in the world.

  Banded tern chicks, trapped adult terns and took measurements, and observed feeding and mating behavior.

# SKILLS

- Programming languages: C++/C, Python, LATEX, R
- Research methods: qualitative methods (ex. ATLAS.ti, IRR), quantitative methods (ex. t-tests, correcting for multiple comparisons)
- Natural languages: English (native), Italian (limited-intermediate), Thai (limited-intermediate)