Ian Drosos

ian.drosos@gmail.com LinkedIn Google Scholar

I am a product engineer and mixed-methods HCI+AI researcher who designs, implements, and evaluates novel AI tools and interactions for knowledge workers

Skills

Programming

- TypeScript (React)
- Python
- Java
- R
- SQL

User Research and Design

- Figma (interaction design)
- Qualitative research (thematic analysis, interviews, content analysis, surveys, comparative tool studies, design probes)
- Quantitative analysis (Python and R)

Selected Work Experience

Trent AI, London UK – *Member of Technical Staff* 7/2025 – CURRENT

- Design, Front-End, and UX lead for all products.
- 0-1 Product Engineer (Design -> TypeScript/React -> Prod).

Microsoft Research, Cambridge UK – *Researcher* 7/2022 – 7/2025

- HCI research on how AI can help users critically think, and on the design and implementation of interfaces that provide greater control over AI responses during knowledge workflows.
- Designed, implemented, and evaluated (n=16) a React JS system that leverages LLMs to generate a dynamic UI containing prompt refinements which provides users greater control of AI responses by performing prompt engineering for the user based on their context.
- Led UX research (n=24) of a novel prototype that leverages LLMs to assist user critical thinking during data-driven decision-making by generating AI 'provocations' that help users think more broadly about their data-driven tasks.
- Authored/co-authored 12 HCI publications and 4 patents.
- Transferred research insights to leadership at product groups within Microsoft.

Autodesk Research, Remote US - *User Interface Research Intern* 1/2021 – 4/2021

- Investigated barriers to providing expert (human) help to questions about feature-rich software like Autodesk Fusion 360.
- Designed, implemented, and deployed a custom survey prototype to collect feedback from experts (n=28).

Microsoft, Redmond WA - *Research Intern* 7/2018 – 12/2018

- Designed, implemented, and evaluated (n=12) a prototype (Wrex) for generating readable Python code through program synthesis within Jupyter notebooks (JavaScript and Python).

- With Wrex, data scientists were significantly more effective and efficient at data wrangling, who found it reduced barriers in having to recall or look up data transform functions.
- Published the results from the evaluation at CHI2020, which won Best Paper.

UCSD - The Design Lab, La Jolla CA - *PhD Researcher* 9/2017 – 6/2022

- HCI research on user-centered learning and data science.
- Published 6 papers and won 2 paper awards.
- Instructor of record for HCI Portfolio Design Studio, and teaching assistant for Interaction Design, HCI Programming Studio, and Data-Driven UX/Product Design.

Verizon, Alpharetta GA - *Member Technical Staff I & II System Engineering* 5/2011 – 7/2015

- Full-stack software engineer for internal systems that manages enterprise accounts, contracts, and purchase orders.
- Developed systems in Java, JavaScript, HTML, and PL/SQL.
- Modernized existing systems by rewriting into new frameworks.
- Debugged and resolved critical issues reported by users, including stabilizing systems during major product rollout.
- Experience working in the complete software development life cycle involving development, documentation, testing, and maintenance.

Education

University of California San Diego, La Jolla CA 2017 – 2022

PhD Cognitive Science

Thesis: Synthesizing Transparent and Inspectable Technical Workflows
HCI research on better interactions for learning/doing data science (6 publications, 2 awards).

North Carolina State University, Raleigh NC 2015 – 2017

MS Computer Science

Thesis: HappyFace: Identifying and Predicting Frustrating Learning Obstacles at Scale
HCI research on detecting frustrating programming learning obstacles (1 publication).

Southern Polytechnic State University*, Marietta GA 2007 – 2011

BS Computer Science **Now Kennesaw State University*

Selected Publications

[1] Dynamic Prompt Middleware: Contextual Prompt Refinement Controls for Comprehension Tasks (CHIWORK 2025 / Released as "Promptions").
[2] Wrex: A Unified Programming-By-Example Interaction for Synthesizing Readable Code for Data Scientists (CHI 2020).
See my CV for a full list of publications.