## Ian Drosos

PhD Candidate Updated: July 9, 2021 Department of Cognitive Science ian.drosos@gmail.com University of California, San Diego (UCSD) iandrosos.me Research human-computer interaction; designing and implementing tools to support and enhance Interests the workflows of content creators, developers, data scientists, and learners; **EDUCATION** University of California, San Diego Ph.D. in Cognitive Science 2017 - Present Advisor: Philip Guo North Carolina State University M.S. in Computer Science 2015 - 2017Thesis: HappyFace: Identifying and Predicting Frustrating Learning Obstacles at Scale, Advisor: Chris Parnin Southern Polytechnic State University 2007 - 2011B.S. in Computer Science EXPERIENCE UCSD - The Design Lab, La Jolla, CA Researcher - Ph.D. Candidate 2017 - Present HCI research in providing better experiences for content creators, programmers, data scientists, and learners. UCSD, La Jolla, CA 2018 - Present Teaching Assistant Interaction Design (COGS120/CSE170) • Winter 2018, 2019 • Professor: Scott Klemmer Human-Computer Interaction Programming Studio (COGS121) • Spring 2018, 2019, 2020, 2021 • Professor: Philip Guo Autodesk, San Rafael, CA 01/2021 - 04/2021Intern - User Interface Research Researching, prototyping, and studying software learning with the HCI and Visualization team at Autodesk Research Microsoft, Redmond, WA Research Intern - Program Synthesis 07/2018 - 12/2018Researching, prototyping, and studying program synthesis interactions for data scientists on the PROSE team (microsoft.github.io/prose) [C.4] Verizon, Alpharetta, GA Member Technical Staff I & II - Systems Engineering 2011 - 2015

Full-stack software engineer developing enterprise systems

using Java, PL/SQL, JavaScript, and HTML

## **PUBLICATIONS**

- C.6 Ian Drosos and Philip Guo. 2021. Streamers Teaching Programming, Art, and Gaming: Cognitive Apprenticeship, Serendipitous Teachable Moments, and Tacit Expert Knowledge. In Proceedings of the Symposium on Visual Languages and Human-Centric Computing, short paper (VL/HCC 2021).

  \*Honorable Mention Paper Award\*
- C.5 Sam Lau, Ian Drosos, Julia Markel and Philip Guo. 2020. The Design Space of Computational Notebooks: An Analysis of 60 Systems in Academia and Industry. In Proceedings of the Symposium on Visual Languages and Human-Centric Computing (VL/HCC 2020).
- C.4 Ian Drosos, Titus Barik, Philip Guo, Robert DeLine, and Sumit Gulwani. 2020. Wrex: A Unified Programming-By-Example Interaction for Synthesizing Readable Code for Data Scientists. In Proceedings of the 2020 CHI Conference on Human Factors in Computing Systems (CHI 2020).

  \*Best Paper Award (Top 1%)\*
- C.3 Adam Rule, Ian Drosos, Aurélien Tabard, and James D. Hollan. 2018. Aiding Collaborative Reuse of Computational Notebooks with Annotated Cell Folding. In Proceedings of the ACM Conference on Computer-Supported Cooperative Work and Social Computing. ACM, Article 150 (CSCW 2018).
- C.2 René Just, Chris Parnin, **Ian Drosos**, and Michael D. Ernst. 2018. Comparing developer-provided to user-provided tests for fault localization and automated program repair. In Proceedings of the 27th ACM SIGSOFT International Symposium on Software Testing and Analysis (ISSTA 2018).
- C.1 Ian Drosos, Philip Guo, and Chris Parnin. 2017. HappyFace: Identifying and Predicting Frustrating Obstacles for Learning Programming at Scale. In Proceedings of the Symposium on Visual Languages and Human-Centric Computing (VL/HCC 2017).

Programming Languages Python, JavaScript, HTML, CSS, Java,  $\LaTeX$ 

SERVICE

Reviewer, UIST 2020, VL/HCC 2021, CHI 2022