Commentary on Publications

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I have worked to publish my work at the most prestigious venues in computer science. In computer science, the "top" papers appear at tier-one conferences. While there is no universal agreement on what makes a conference "tier one" or not, one datapoint is csrankings.com, which is a very critical objective ranking system that counts only papers appearing in one of the *top two* venues within a research area. **Over the past few years, I have focused nearly exclusively on targeting these most-prestigious venues**. While I have collaborated and published some work (primarily with students) that has appeared at second-tier venues or workshops, **all** of my core research is submitted to tier-one venues.

Over the past several years I have been working to significantly boost my productivity, and particularly the number of papers in my portfolio that appears at top venues. During 2021–2022, my group was primarily focused on investing in core research infrastrucure. During 2023, I began to write and submit many papers detailing the fruits of our effort. The result has been papers that have been highly regarded, appearing at the most selective venues (USENIX, NeurIPS, AAAI, OOPSLA, ASPLOS, VLDB, and HPDC) and has won awards (best paper at OOPSLA '23), while also garnering attention in the broader open-source and tech communities (with our work appearing on the front page of "Hacker News" and the popularity of our Ascent crate for Datalog in Rust).

My papers span several directions. The first is language-based security, a field in which I am well established and have published many papers. My papers on reverse engineering (e.g., my USENIX paper with Dan Votipka) and information flow (CSF '20) demonstrate my continued activity in this direction, further cemented by a longstanding collaboration with the US laboratory for physical sciences that resulted in two papers at NeurIPS '24 (datasets and benchmarks track). The second direction is extensions to the logic programming language Datalog, used for a broad variety of applications spanning security, artificial intelligence, and many related fields. I have published many papers on this direction, fueled by a $1M NSF PPoSS large funding that work from 2023–2028.