

List of publications

Snehasish Kumar

February 9, 2017

1. Snehasish Kumar, Nick Sumner, Vijayalakshmi Srinivasan, Steve Margerm, and Arrvindh Shriraman. Needle: Leveraging program analysis to extract accelerators from whole programs. In *23rd ACM International Conference on High Performance Computer Architecture, HPCA '17*, feb 2017.
Acceptance Rate $\approx 22\%$.
2. Amirali Sharifian, Snehasish Kumar, Apala Guha, and Arrvindh Shriraman. ChainSaw: Creating Von-Neumann Accelerators with Fused Instruction Chains. In *49th Annual IEEE/ACM International Symposium on Microarchitecture, MICRO '16*, Washington, DC, USA, oct 2016. IEEE Computer Society.
Acceptance Rate $\approx 22\%$.
3. Snehasish Kumar, Nick Sumner, and Arrvindh Shriraman. SPEC-AX: Extracting Accelerator Benchmarks from Microprocessor Benchmarks. In *2016 IEEE International Symposium on Workload Characterization, IISWC '16*, pages 1–11, September 2016.
Acceptance Rate $\approx 30\%$.
4. Snehasish Kumar, Vijayalakshmi Srinivasan, Amirali Sharifian, Nick Sumner, and Arrvindh Shriraman. Peruse and Profit: Estimating the Accelerability of Loops. In *30th ACM International Conference on Supercomputing, ICS '16*, pages 21:1–21:13, New York, NY, USA, 2016. ACM.
Acceptance Rate $\approx 24\%$.
5. Snehasish Kumar, Arrvindh Shriraman, and Naveen Vedula. Fusion: Design Tradeoffs in Coherent Cache Hierarchies for Accelerators. In *42nd Annual International Symposium on Computer Architecture, ISCA '15*, pages 733–745, New York, NY, USA, 2015. ACM.
Acceptance Rate $\approx 19\%$.
6. Snehasish Kumar, Naveen Vedula, Arrvindh Shriraman, and Vijayalakshmi Srinivasan. DASX: Hardware Accelerator for Software Data Structures. In *29th ACM International Conference on Supercomputing, ICS '15*, pages 361–372, New York, NY, USA, 2015. ACM.
Acceptance Rate $\approx 25\%$.
7. Hongzhou Zhao, Arrvindh Shriraman, Snehasish Kumar, and Sandhya Dwarkadas. Protozoa: Adaptive Granularity Cache Coherence. In *40th Annual International Symposium on Computer Architecture, ISCA '13*, New York, NY, USA, jun 2013. ACM.
Acceptance Rate $\approx 19\%$.
8. Snehasish Kumar, Hongzhou Zhao, Arrvindh Shriraman, Eric Matthews, Sandhya Dwarkadas, and Lesley Shannon. Amoeba-Cache: Adaptive Blocks for Eliminating Waste in the Memory Hierarchy. In *45th Annual IEEE/ACM International Symposium on Microarchitecture, MICRO '12*, Washington, DC, USA, dec 2012. IEEE Computer Society.
Acceptance Rate $\approx 18\%$.