List of publications

Snehasish Kumar October 15, 2016

1. Snehasish Kumar, Nick Sumner, Vijayalakshmi Srinivasan, Steve Margerm, and Arrvindh Shriraman. Needle: Leveraging program analysis to extract accelerators from whole programs. In *Proceedings of the 23rd ACM International Conference on High Performance Computer Architecture*, HPCA 2017, feb 2017.

- 2. Amirali Sharifian, Snehasish Kumar, Apala Guha, and Arrvindh Shriraman. ChainSaw: Creating Von-Neumann Accelerators with Fused Instruction Chains. In *Proceedings* of the 49th Annual IEEE/ACM International Symposium on Microarchitecture, MICRO 2016, Washington, DC, USA, oct 2016. IEEE Computer Society.
- 3. Snehasish Kumar, Nick Sumner, and Arrvindh Shriraman. SPEC-AX: Extracting Accelerator Benchmarks from Microprocessor Benchmarks. In *Workload Characterization* (IISWC), 2016 IEEE International Symposium on, IISWC 2016, September 2016.
- 4. Snehasish Kumar, Vijayalakshmi Srinivasan, Amirali Sharifian, Nick Sumner, and Arrvindh Shriraman. Peruse and Profit: Estimating the Accelerability of Loops. In *Proceedings of the 2016 International Conference on Supercomputing*, ICS '16, pages 21:1–21:13, New York, NY, USA, 2016. ACM.
- 5. Snehasish Kumar, Arrvindh Shriraman, and Naveen Vedula. Fusion: Design Tradeoffs in Coherent Cache Hierarchies for Accelerators. In *Proceedings of the 42Nd Annual International Symposium on Computer Architecture*, ISCA '15, pages 733–745, New York, NY, USA, 2015. ACM.
- 6. Snehasish Kumar, Naveen Vedula, Arrvindh Shriraman, and Vijayalakshmi Srinivasan. DASX: Hardware Accelerator for Software Data Structures. In *Proceedings of the 29th ACM on International Conference on Supercomputing*, ICS '15, pages 361–372, New York, NY, USA, 2015. ACM.
- 7. Hongzhou Zhao, Arrvindh Shriraman, Snehasish Kumar, and Sandhya Dwarkadas. Protozoa: Adaptive Granularity Cache Coherence. In *Proceedings of the 40th Annual International Symposium on Computer Architecture*, ISCA 2013, New York, NY, USA, jun 2013. ACM.
- 8. Snehasish Kumar. Architectural Support for a Variable Granularity Cache Memory System. *MSc Thesis*, apr 2013.
- 9. 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 *Proceedings of the 45th Annual IEEE/ACM International*

 $Symposium\ on\ Microarchitecture,$ MICRO 2012, Washington, DC, USA, dec 2012. IEEE Computer Society.