

Research Interests	Monitoring and Management of Large-Scale Systems and Software, Machine Learning, End-to-end Tracing, Data Analysis, Cloud Computing, High Performance Computing	
Education	Boston University, Electrical and Computer Engineering Dept. 2015 - Present PhD in Computer Engineering (Advisor: Prof. Ayşe K. Coşkun) GPA: 3.93 Coursework: Advanced Data Structures, Computer Architecture, Digital Design, Embedded Systems, Data Mining, Operating Systems, Cybersecurity, Advanced Computer Systems Middle East Technical University (METU), Turkey 2010 - 2015 B.S. in Electrical and Electronics Engineering GPA: 3.23, Ranking: 37 th /353 Minor in History of Philosophy GPA: 3.50	
Research Experience	PeacLab Research Group , Boston, MA <i>September 2015 – present</i> Researched on data center monitoring and analytics, interference in HPC and cloud systems, end-to-end tracing of distributed applications.	
Software Skills	<i>Programming Languages:</i> Verilog, C, C++, Rust, Java, Python, Perl, R, Bash (and other shell) <i>Environments and Tools:</i> OpenStack, scikit-learn, Vowpal Wabbit, Autotools, L ^A T _E X	
Selected Publications	<p>E. Ates, L. Sturmann, M. Toslali, O. Krieger, R. Megginson, A.K. Coskun, R.R. Sambasivan, “An automated, cross-layer instrumentation framework for diagnosing performance problems in distributed applications,” to appear in <i>Symposium on Cloud Computing (SoCC)</i>, 2019.</p> <p>E. Ates, Y. Zhang, B. Aksar, J. Brandt, V.J. Leung, M. Egele, A.K. Coskun, “HPAS: An HPC Performance Anomaly Suite for Reproducing Performance Variations,” in <i>Intl. Conf. on Parallel Processing (ICPP)</i>, Kyoto, 2019.</p> <p>O. Tuncer, E. Ates, Y. Zhang, A. Turk, J. Brandt, V.J. Leung, M. Egele, A.K. Coskun, “Online Diagnosis of Performance Variation in HPC Systems Using Machine Learning,” in <i>IEEE Trans. on Parallel and Distributed Systems</i>, vol. 30, no. 4, pp. 883-896, 2019.</p> <p>Q. Xiong, E. Ates, M.C. Herbordt, A.K. Coskun, “Tangram: Colocating HPC Applications with Oversubscription,” in <i>IEEE High Performance Extreme Computing Conf.</i>, Boston, 2018.</p> <p>E. Ates, O. Tuncer, A. Turk, J. Brandt, V.J. Leung, M. Egele, A.K. Coskun, “Taxonomist: Application Detection through Rich Monitoring Data,” in <i>European Conf. on Parallel and Distributed Systems (Euro-Par)</i>, Torino, 2018.</p>	
Internships	Google LLC , New York, NY <i>Spring 2019</i> As part of the Google Wide Profiling team, optimized the memory allocator TCMalloc. Lawrence Livermore National Laboratory , Livermore, CA <i>Summer 2017</i> Investigated the effect of power, network QoS, external traffic, number of processes, etc. on different supercomputing benchmarks, used machine learning to model performance. Sandia National Laboratories , Albuquerque, NM <i>Summer 2016</i> Analyzed system monitoring data to automatically detect and classify anomalies in HPC clusters. Investigated allocation and task mapping algorithms for dragonfly systems.	
Teaching Experience	Applied Algorithms and Data Structures , Boston University <i>Spring 2016, Fall 2016</i> Head TA; held weekly discussion sessions, graded exams/assignments, coordinated the graders.	
Awards and Scholarships	Best Artifact Award at Euro-Par August 2018 Given for the data, code and Jupyter Notebooks released with the publication Gauss Award at ISC-HPC June 2017 Research paper award given by German Gauss Center for Supercomputing	
Invited Talks	“Diagnosing Performance Variations in HPC Applications Using Machine Learning”, Lawrence Berkeley National Laboratory - NERSC, July 2017.	