

# Adam Fidel

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## WORK EXPERIENCE

**Intel**, Austin, TX  
Middleware Development Engineer Aug 2022 – Present  
Development of a parallel C++ library for GPUs (Intel oneDPL).

**Quantlab**, Houston, TX  
Senior Quantitative Developer Mar 2019 - Aug 2022  
Development of a low-latency C++ automated trading platform.

**Google**, Mountain View, CA, USA  
Software Engineer, Ph.D. Intern Sep 2015 – Dec 2015  
Member of the search infrastructure team.  
Designed and implemented parallel graph mining algorithms for massive scale graphs.

## EDUCATION

**Texas A&M University**, College Station, TX, USA  
Doctor of Philosophy (Ph.D.) in Computer Science December 2021  
Cumulative GPA: 4.0 / 4.0  
Advisors: Professors Nancy Amato and Lawrence Rauchwerger  
Research areas: High performance computing, parallel algorithms,  
parallel graph processing.  
Dissertation: *Bounded Asynchrony and Nested Parallelism for Scalable Graph Processing*

**Texas Tech University**, Lubbock, TX, USA  
Bachelor of Science (B.S.) in Computer Science May 2010  
Summa Cum Laude  
Cumulative GPA: 4.0 / 4.0

## RESEARCH EXPERIENCE

**Texas A&M University - Parasol Lab**, College Station, TX, USA  
Research Assistant May 2010 – Dec 2021  
*Advisors:* Professors Nancy Amato and Lawrence Rauchwerger  
Developer of STAPL, a parallel superset of the C++ Standard Template Library.  
Designed, implemented novel graph algorithms and techniques that scale up to 131,072+ cores.

## SELECTED

### PUBLICATIONS

**Best Paper Award.** Harshvardhan, [Adam Fidel](#), Nancy M. Amato, Lawrence Rauchwerger, “KLA: A New Algorithmic Paradigm for Parallel Graph Computations,” In Proc. Int. Conf. on Par. Arch. and Comp. Tech. (PACT), Edmonton, Alberta, Canada, Aug 2014.

[Adam Fidel](#), Sam Ade Jacobs, Shishir Sharma, Nancy M. Amato, Lawrence Rauchwerger, “Using Load Balancing to Scalably Parallelize Sampling-Based Motion Planning Algorithms,” In Proc. Int. Par. and Dist. Proc. Symp. (IPDPS), Phoenix, Arizona, USA, May 2014.

**Best Paper Finalist.** Harshvardhan, [Adam Fidel](#), Nancy M. Amato, Lawrence Rauchwerger, “An Algorithmic Approach to Communication Reduction in Parallel Graph Algorithms,” In Proc. Int. Conf. on Par. Arch. and Comp. Tech. (PACT), San Francisco, CA, USA, November 2015.

[Adam Fidel](#), Francisco Coral Sabido, Colton Riedel, Nancy M. Amato, Lawrence Rauchwerger, “Fast Approximate Distance Queries in Unweighted Graphs using Bounded Asynchrony,” In Wkshp. on Lang. and Comp. for Par. Comp. (LCPC), Rochester, NY, USA, September 2016.

## SKILLS

C++, MPI, OpenMP, Python, Javascript (*React*)  
<https://github.com/ledif/>  
<https://gitlab.com/ledif/>