

Animesh Tripathi

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EDUCATION	University of Illinois , College of Engineering Bachelor of Science (B.S.) in Computer Science Coursework, Honors and Standardized Testing: <ul style="list-style-type: none">Applied Machine Learning, Compilers, Distributed Systems, Numerical Methods, Algorithms, Data Structures (Honors), Computer Architecture, System Programming (Honors), Artificial Intelligence, Linear Algebra, Probability, Programming Studio, Computer Security, Data Mining, Databases, UI Design, Virtual RealityJames Scholar • Dean's List • SAT I: 2320/2400	Urbana-Champaign, IL Aug 2014 - May 2018
EXPERIENCE	Facebook Software Engineer Software Engineering Intern, Messenger Ranking and Search <ul style="list-style-type: none">Built a distributed ranking system that currently ranks the social graph for Messenger Active Now, Broadcast Flow, Days and Search, among others, serving billions of requests everydayImproved metrics such as weekly sends, threads and thread attribution from active now and sharingSaved 1+% of global Facebook CPUDistributed Systems, Backend, Applied Machine Learning, Async, C++, Hack (PHP) Pinterest Software Engineering Intern, Core Infrastructure - Serving Systems <ul style="list-style-type: none">Built a high performance distributed key-value store in C++, using RocksDB, Folly and FBThrift.In production for Ads, Homefeed and Related Pins, serving millions of QPS with single-digit ms P99 latencies.Wrote a MapReduce tool to export Hive tables for storage on distributed key value stores. Jump Trading Software Engineering Intern (Core Development) Research and Development Engineering Intern Software Engineering Intern (R&D) <ul style="list-style-type: none">Developed a new price feed, primarily using C++.Developed a C/C++ API for cache-locked memory allocation for the company's core trading platform.Worked on analyzing and improving OpenSM load balancing over InfiniBand fabrics.Developed tool to analyze and report UDP Multicast topology over InfiniBand fabrics using RDMA.Developed parallelized low-latency analytical framework in Cython to simulate actual and random Multicast feed arrangements, parse market data and calculate microsecond-level utilization EMAs.Wrote a simulated annealing optimization algorithm and multiple cost functions for packet queueing. National Center for Supercomputing Applications Software Engineering Intern <ul style="list-style-type: none">Developed a new color-correction algorithm for color-blind computer users.Developed image processing simulations and metrics to compare color-correction algorithms. Rithmio Software Engineering Intern	Menlo Park, CA Starting Aug 2018 Sep 2017 – Dec 2017 San Francisco, CA May 2017 – Aug 2017 Chicago, IL & Champaign, IL Spring 2017 (part-time) Summer 2016 (full-time) Summer 2015 (full-time), Fall '15, Spring '16 (part-time) Urbana, IL Feb 2015 – May 2015 Champaign, IL Sep 2014 – Dec 2014 Remote Nov 2012 – Jan 2013
RESEARCH	Optimizing Digital Content for Color-Blind Users <ul style="list-style-type: none">Implemented and tested a new color-correction algorithm for color-blind computer users.Developed image processing simulations and metrics to compare color-correction algorithms.	Mar 2013 – May 2014
SELECTED ACHIEVEMENTS	<ul style="list-style-type: none">Won the Microsoft Prize at TreeHacks, Stanford University (2015)Won the Capital One Programming Challenge and trip to the Summit for Software Engineers.Selected for the ACM ICPC 2015 Mid-Central Regional competitionWon the Google CS Connect Award and scholarship at Intel ISEF 2014Won the 4th Grand Award in Computer Science at Intel ISEF 2014Selected as a Regional Finalist (top 30 worldwide) for the Google Science FairFinalist, Indian National Olympiad in Informatics (qualification round for IOI Training Camp)Grand Prize Finalist, Google Code-In 2013 (The Fedora Project)International Scholar, The Global Education and Leadership Foundation (tGELF)	
LANGUAGES	C/C++, Python, PHP/Hack, Verilog, HTML/CSS, JavaScript, Java, SQL, \LaTeX	
FRAMEWORKS	Thrift, facebook::folly, RocksDB, NumPy, Cython, Matplotlib, AWS, LAMP, WebSockets	