# Animesh Tripathi

tripath4@illinois.edu • http://animesh.co/ • Last updated on 10 July 2018

**EDUCATION**

**University of Illinois**, College of Engineering — Urbana-Champaign, IL

Bachelor of Science (B.S.) in Computer Science — Aug 2014 - May 2018

**Selected Coursework**

| | | | |
|---|---|---|---|
| Algorithms & Models of Computation | Compilers | Programming Studio | Linear Algebra |
| Applied Machine Learning | Databases | Computer Security | Numerical Methods |
| Artificial Intelligence | Data Mining | Data Structures | UI Design |
| Probability & Statistics for CS | Distributed Systems | System Programming | Virtual Reality |

**EXPERIENCE**

**Facebook** — Menlo Park, CA

Software Engineer — Jul 2018 - *present*

Software Engineering Intern, Messenger Ranking and Search — Sep 2017 – Dec 2017
- Built a distributed ranking system that currently ranks the social graph for Messenger Active Now, Broadcast Flow, Stories and Search, among others, serving billions of requests everyday
- Improved metrics such as weekly sends, threads and thread attribution from Active Now and sharing
- Saved 1+% of global Facebook CPU
- Distributed Systems, Backend, Applied Machine Learning, Async, C++, Hack (PHP)

**Pinterest** — San Francisco, CA

Software Engineering Intern, Core Infrastructure - Serving Systems — May 2017 – Aug 2017
- Built a high performance distributed key-value store in C++ using RocksDB and Thrift.
- 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** — Chicago, IL & Champaign, IL

Software Engineering Intern (Core Development) — Spring 2017 (part-time)
- Developed a new price feed, primarily using C++.

Research and Development Engineering Intern — Summer 2016 (full-time)
- Developed a C/C++ API for cache-locked memory allocation for the company's core trading platform.

Software Engineering Intern (R&D) — Summer 2015 (full-time), Fall '15, Spring '16 (part-time)
- Worked on analyzing and improving load balancing for co-located trading networks
- Developed tool to analyze and report UDP Multicast topology using RDMA.
- Developed parallelized analytical framework in Cython to simulate actual and random Multicast feed arrangements, parse market data and calculate microsecond-level utilization EMAs.

**National Center for Supercomputing Applications** — Urbana, IL

Software Engineering Intern — Feb 2015 – May 2015

**Rithmio** — Champaign, IL

Software Engineering Intern — Sep 2014 – Dec 2014

**The Fedora Project** — Remote

Student Contributor — Nov 2012 – Jan 2013

**RESEARCH**

**Optimizing Digital Content for Color-Blind Users** — Mar 2013 – May 2014
- Implemented and tested a new color-correction algorithm for color-blind computer users.
- Developed image processing simulations and metrics to compare color-correction algorithms.

**SELECTED ACHIEVEMENTS**

- 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 competition
- Won the **Google CS Connect Award** and scholarship at Intel ISEF 2014
- Won the **4th Grand Award in Computer Science at Intel ISEF 2014**
- Selected as a Regional Finalist (top 30 worldwide) for the **Google Science Fair**
- Finalist, 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, Haskell, HTML/CSS, JavaScript, Java, SQL, LaTeX

**FRAMEWORKS**

Thrift, facebook::folly, RocksDB, NumPy, Cython, Matplotlib, AWS, LAMP, WebSockets