

Andrei Maximov

<https://github.com/andreimaximov>
amaximov@ucsd.edu

EDUCATION

UC SAN DIEGO

B.S. IN COMPUTER SCIENCE

October 2014 - Present | La Jolla, CA

Jacobs School of Engineering
Provost Honors

Cum. GPA: 3.83 / 4.0

Major GPA: 4.0 / 4.0

LINKS

<https://github.com/andreimaximov>

<http://andreimaximov.com>

COURSEWORK

Advanced Data Structures

Algorithms

Operating Systems

Computer Architecture

Parallel Computing

Advanced Graphics

Neural Networks and Machine Learning

Calculus

Linear Algebra

SKILLS

PROGRAMMING

Proficient

C++ • Java • Python

Experience

C • Lua • JavaScript/Node.js • PHP •

OCaml • Bash

Familiar

SQL

TOOLS

Datastores

PostgreSQL • MySQL • Redis •

Memcached • Kafka • HDFS

Frameworks

Hadoop MapReduce • Cascading •

Apache Storm • Apache Spark

Other

Angular 2 • React • Git

EXPERIENCE

QUORA | SOFTWARE ENGINEERING INTERN

June 2017 - Present | Mountain View, CA

- Working on data infrastructure to improve reliability, monitoring, and stream processing abstractions with Apache Kafka and Spark.

GOOGLE | SOFTWARE ENGINEERING INTERN

June 2016 - September 2016 | Mountain View, CA

- Worked on the Google Apps team to develop an Object Relational Mapping abstraction for integrating the Google Apps Admin SDK as a datastore into Google App Maker.
- Used Java on the backend and JavaScript on the frontend to create a query engine with filtering and relations support.

EFOLDER | SOFTWARE DEVELOPER INTERN

June 2016 - September 2016 | Mountain View, CA

- Developed a scalable and fault tolerant Lambda Architecture reporting infrastructure using Hadoop MapReduce on EMR and AWS Lambda for realtime Kinesis stream processing.
- Built an internal MapReduce abstraction library on top of Cascading for improved data validation, pipeline management, and simplified join algorithm for graph data sets.
- Implemented an automated billing system using PHP and PostgreSQL responsible for processing a majority of revenue.

PROJECTS

PATHTRACER | C++ RENDERING ENGINE

- Developed a physically accurate rendering engine with support for Monte Carlo global illumination, fresnel reflections/refractions, texture mapping, glossy surfaces, importance sampling, and multi-threading that probabilistically approximates the Rendering Equation.

PROGRAMMING PUZZLES | C++, PYTHON, JAVA

- I enjoy solving Codeforces and HackerRank programming puzzles and learning new algorithms in my free time.

INTO-IT GAMES | GAME DEVELOPMENT STARTUP, LUA, JAVA, C++

- Developed five cross platform iOS and Android games in high school using Lua that reached over 100,000 cumulative downloads and 500,000 game sessions.
- Used Lua with an object oriented architecture for core development.

ANDROID PUSH NOTIFICATION SERVER | JAVA

- Developed a web app on Google App Engine for managing apps and registering devices in Cloud Datastore.
- Wrote a REST API for device subscriptions, channel management, and targeted push notification dispatch through GCM.

AWARDS

2013 Outstanding Achievement in AP Physics C - Mechanics