Samiur Khan

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Education
University of Michigan, Ann Arbor   *Class of 2020*
  - B.S.E. in Computer Science, Minor in Biochemistry

Professional Experience
Google – Data Infrastructure and Analysis – Mountain View, CA   *May 2018 - August 2018*
Engineering Practicum Intern
  - Worked with a team to develop an internal logging system for a distributed data processing framework called Conduit
  - Built and tested a data processing pipeline to tail other data processing pipelines for their transaction history. Filtered out data we didn't need and partitioned the data we did need into files to allow Conduit developers to search the history of a running data processing job using an SQL like API. Reduced the search space by 93%. Reduced search time from 30-60 minutes to 3-5 minutes.
  - Designed an API to read transaction history with a lower memory footprint than pre-existing APIs

University of Michigan Medical School   *December 2017 - Present*
Research Engineer - Zhang Lab, Dept. of Computational Medicine and Bioinformatics
  - Refactored and modernized pre-existing software libraries, allowing for large scale protein structure alignment testing.
  - Added features to automate testing with entire directories of proteins rather than just two, speeding up testing and helping maintain key speed benchmarks.

University of Michigan Electrical Engineering and Computer Science Department   *June 2017 - Present*
Teaching Assistant for EECS 398 - Computing and Tools for Computer Scientists
  - Class teaches how to learn about and how to use the various tools used by computer scientists
  - Maintained the course site (c4cs.github.io), and worked with a team to run office hours to help students with weekly assignments.

Google – Street View Infrastructure – Mountain View, CA   *May 2017 - August 2017*
Engineering Practicum Intern
  - Worked with a team to prototype an internal tool that showed animations of Google Street View data
  - Designed and implemented a video encoder using FFMPEG that can encode MP4s, FLVs, and WebM videos. Worked with a team to incorporate CPU benchmarking tests to verify that it was servable over HTTP requests.
  - Deployed the video recorder with a C++ based HTTP server that can handle video generation for different input requests.

Personal Projects
Condit   *August 2017 - Present*
  - C++ object for holding information about the status of binaries. Working with a team to expand the tool to support programming languages and to expand its use. It's ::util::Status. Learn more: github.com/samiurkh1n/Condit

Awards
  - Gates Millennium Scholar, merit and needs based scholarship granted to less than 2% of around 55,000.
  - Shipman Scholar, merit scholarship granted to less than 1% of 15862 incoming students.

Skills & Interests
Languages and Technologies: C++, C, Python, Go, HTML/CSS, Javascript, Docker, Kubernetes, Google Cloud, Shell Scripting
Skills: Public speaking, documentation, web application engineering, API design, software testing, algorithm design and analysis, familiarity with computer architecture (including ARM Assembly, Digital Logic, Pipelined Processors, Processor Caching).
Interests & Hobbies: **I love cycling**. I spend half of my free time riding my bike.