KASI MANIKUMAR

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EDUCATION

University of Illinois, at Urbana-Champaign, graduation: May 2018
B.S. **Computer Science** and **Statistics**, minor: Mathematics

Courses completed:

Data Structures	Computer Architecture
Systems Programming	Computer System Organization
Parallel Programming	Programming Languages & Compilers
Applied Regression & Design	Numerical Methods
Statistical Programming Methods	Fundamental Mathematics
Calculus I, II, III	Statistics and Probability I, II

EXPERIENCE

GPU Architecture Intern, May 2017 - August 2017
NVIDIA

- Wrote an automated regression testing tool in CUDA C++ and Perl to validate GPU performance models.
- Developing an application performance analysis tool in C++ and Python to analyze CUDA programs and identify architectural bottlenecks.
- Automated/simplified the use of several internal tools

Firmware Developer, February 2017 - May 2017
Mesh++, Champaign, IL

- Working to provide WiFi services to UIUC, Chicago (Douglas Park), and in 3rd world countries (Tanzania) using wireless mesh networking technology.
- Developing firmware based on OpenWRT for router nodes. Implementing features such as a splash page, throughput measurement, and power consumption tracking as well as setting up scripts for routers to perform periodic tasks
- Designing and executing network tests, writing related segments of reports for competitions, investors, and advisors.

Technical Analyst Intern, June 2015 - August 2015
NetImpact Strategies, Vienna, VA

- Implemented CRM system (SplendidCRM) for client and specialized it according to client's requirements; Created comprehensive technical documentation to show non-technical employees how to perform tasks with the system.
- Planned and led seamless transition in productivity suites from Google apps to Microsoft 365 for 80+ employees; worked with employees and vendors to determine requirements and select an appropriate licensing plan.

PROJECTS

- Transit-Alarm: Android app to alert user based on GPS location rather than time. Uses location-services API and Bay Area Rapid Transit API. written in Java.
- Dynamic-Memory-Allocator: Implemented malloc, calloc, realloc, and free with an implicit free-list, block-coalescing, and block-splitting. written in C.
- MIPS-Interpreter [WIP]: An interpreter for a subset of the MIPS instruction set. written in C.
- Shoe-Bot: Script to automate the add-to-cart process on nike.com and adidas.com. written in Python.

LANGUAGES/TOOLS/SKILLS

- Languages: Java, C, C++, Python, R, Haskell, Verilog (for hardware description), CUDA C/C++, Perl
- Tools: Perforce, Git, SVN, MPI, OpenMP, Numpy, Scikit-Learn, Selenium, Android SDK, Adobe Illustrator
- Skills: parallel programming, machine learning, UNIX shell programming, networking (TCP/UDP), Android application development

AWARDS

- Eagle Scout - Boy Scouts of America, 2014