Krutarth Rao
Purdue University ▪ *1301 3rd St, West Lafayette, IN, USA*

raok@purdue.edu ▪ *+1 (419) 871 1645* ▪ *raok.azurewebsites.net* ▪ *www.linkedin.com/in/raokrutarth*

Objective
Seeking an internship position to use my Computer Science knowledge for real world applications.

Education
Bachelors of Science in **Computer Science** (Aug 2014 – May 2018)
Minor in Economics
Overall **GPA**: 3.80

Relevant Coursework
Python, Java, C/C++, Discrete structures, Calculus 1-3, Micro/Macro Economics, etc.

Experience and Course Projects

- **Memory allocation/management, Data Structures and Qt GUI in C/C++**
  Utilizing pointers and templates to create data structures like Single/Double Linked Lists and generic Array Lists in C++. Created a full GUI application with the Qt API similar to MS Paint in C++. Project required efficient utilization of data structures, understanding a new API and documentation in C++. Also covered memory allocation by C and C++ of runtime objects to the memory's Heap, Stack or BSS. Used debugging tools like gdb and ddd. Also had an introduction to garbage collection techniques in C.

- **Server and Client application, Parallel programming and OOP in JAVA**
  Developed a multithreaded Server and client application using SocketServer API over LAN and WAN for the backend of the Purdue SafeWalk application. This was a team project requiring good work division and time coordination to efficiently pool together each member's work. Also covered stream IO over networks and utilizing various Java library data structures such as Hash maps, Stacks, Queues etc.

- **Developing MVC4 web application & Personal webpage**
  Personal projects to explore web applications, hosting on platforms like Azure, user friendly web design, database querying and familiarization with the .NET platform. The personal webpage is a little side project to practice design and aesthetics for web development using a template designed with javascript, HTML and CSS.

- **2D GUI gaming and OOP in Python**
  Final project utilized external GUI libraries to make a 2D, multiplatform board game with real time score keeping. Also used graphing libraries to make user interactive programs to represent plain text numerical data. Basics like mathematical sequences, file and stream IO and handling CLI input were also covered.

Leadership and Awards

- **CS180: Java Programming** *Undergraduate Teaching Assistant at Purdue*
  Right after I finished taking the Java programming class, I was recruited by the teaching staff to assist in teaching the course for the semesters to follow. I explain features/techniques students can use to solve the given problem. I also help them debug their code. Multiple classes of 25 or more students.

- **Web Manager & officer for Purdue Boxing Club**
  I maintain social media presence, use cloud services to coordinate logistics and I am building a website for the club with HTML and JS styling with plans to host it on Azure.

- **Member of National Kenya Under-19 Cricket Team (as of 2013)**
  I was part of the Under-19 camp in the 2013 season and also played under the current Kenyan captain in the East Africa Premier League.

- **Group Leader for the President's Awards program in Kenya for 3 years**
  I led my 10 member group though the Presidents Awards program to the Gold level and received the certificates from Kenyan President Mwai Kibaki at the State House. The program involves community service and expeditions into rural parts of Kenya to learn more about the community we live in.

- **Cambridge International AS and A Level Applied Information and Communication Technology**
  I set the record for the highest grade attained at my High School for applied ICT at AS level in 2014.

- **Best Cambridge IGCSE Overall results in my High School & Best GCE results in Math and ICT at AS-level**
  I attained the best overall results in the Cambridge international GCSE exams along with the best results in Math and Applied information and communication technology (ICT) at GCE level in my high school.