# Varan Sharma

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### **Qualifications**

- Competent in: C (Sockets API), C++ (Boost.Asio, Qt Framework), Java, Objective-C (SpriteKit), x86 Assembly
- Familiar with: HTML/CSS, JavaScript, Bash, Python, Haskell, VBA, SQL, Swift
- Platforms: Linux, iOS, OS X, Windows
- Website: http://www.varan-sharma.com
- LinkedIn: https://www.linkedin.com/in/varan-sharma
- GitHub: https://github.com/aanrv

## **Experience**

JPMorgan Chase & Co.

Technology Analyst Intern

Summer 2016 - Present

- Automated Microsoft Excel information processing procedures using VBA in the Windows environment, thereby eliminating roughly 5 hours of error-prone manual data entry
- Assisted in debugging Java applications
- Designed internal sites using Confluence, HTML, and JavaScript

### **Side Projects**

P2P File Transfer Client – Cross-Platform Network Application

Fall 2016

- Technologies Used: C++ (Boost.Asio, Qt Framework)
  - A cross-platform desktop client for transferring files among peers on network
  - Used Boost. Asio to implement cross-platform network connectivity on TCP
  - Clients create a peer-to-peer network to transfer data, removing the need for a central server
  - The GUI was implemented using the Qt Framework with C++
  - Source code available at: https://github.com/aanrv/P2P-File-Transfer-Client

Tron Light Cycles – Linux Network Application

Winter 2015 - Spring 2016

Technologies used: C (Sockets API, ncurses)

- An implementation of the Tron Light Cycles game. The goal of each player is to force the other to collide.
- Provided online gameplay capabilities by designing a client-server model built on TCP
- Implemented a mechanism to ensure absolute synchronization across remote hosts
- Designed text based graphics using the neurses library
- Source code available at: https://github.com/aanrv/Tron-Light-Cycles-Online

Neighbor Tiles – iOS Game Application

Fall 2014 – Fall 2015

Technologies used: Objective-C (SpriteKit, AVFoundation, CoreGraphics), Adobe Photoshop CS5

- A puzzle game where tapping on a tile changes its neighbors' colors; the player must make all tiles black
- Wrote an O(n) algorithm to solve puzzle layouts that can be composed in over 65,000 variations
- Extensive use of Object Oriented Programming (OOP) concepts
- Application accepted on App Store with over 150 downloads within one week of release
- Source code available at: https://github.com/aanrv/Neighbor Tiles

#### **Education**

City College of New York

Fall 2013 – Fall 2016

B.S. Computer Science (Incomplete)

 Relevant Coursework: Introduction to Computer Science, Discrete Mathematics, Programming Languages (Functional Programming), Assembly Language, Fundamentals of Computer Systems, Data Structures, Probability and Statistics, Algorithms, Software Design Laboratory, Software Engineering, Operating Systems, Computer Networks