## Joseph Phan

1984 Linden Lane, Milpitas, CA 95035 (408) 646-3931 | josephkphan@gmail.com | josephkphan.github.io

Education Santa Clara University, Santa Clara, CA Sept 2014

Sept 2014 - Jun 2018

Expected B.S. in Computer Science and Engineering (Current GPA: 3.65)

Related

Computer Networks, Advanced Data Structures, Intro to Logic Design, Intro to Embedded Systems,

Coursework Electric Circuits, Discrete Mathematics, Abstract Data Types & Structures, Programming Languages

Work Experience Santa Clara University, Santa Clara, CA Research Assistant (Data Mining) Nov 2015 - Present

- Developed programs to effectively process large sets of data and discover patterns and trends in Java
- Translated and programmed data mining questions into mathematical equations on CPLEX using OPL (Optimization Programming Language)
- Worked with Dr. Haibing Lu to create and develop new data mining algorithms

Santa Clara University, Santa Clara, CA Teaching Assistant (Intro to C) Sept 2016 - Present

- Provide guidance to students to develop and implement well structured programs for business applications
- Host tutoring sessions to help students understand the foundational concepts of programming

Volunteer Work Kennedy Elementary School, San Jose, CA STEM Enrichment Instructor Sept 2015 - Dec 2015

- Led an after school program for underprivileged kids and introduced them to topics of engineering
- Researched challenges surrounding K 12 STEM education in the Bay Area
- Designed class lessons and lead fun team building exercises

Games Published **Betrayal (Android)** Programmer, Network Engineer, and Technical Artist June 2016 - Aug 2016

- Developed a multiplayer game using Node.JS and Socket.IO for client-server communication, published on Heroku
- Created a GUI using LibGDX for users to easily access different parts of the game
- Integrated and maintained artwork in the game using Java libraries Scene2D, AssetManager, and ObjectMap

**Bounded (iOS / Android)** Programmer, Designer, and Lead Artist June 2015 - Sept 2015

- Used Java and Box2D to program the physical properties of the game objects
- Designed levels on Tiled and tested them repeatedly to ensure a challenging gameplay
- Participated in team meetings to discuss the architectural design, implementation, and organization
- Assembled and created an image library using photoshop

**Publications** Exact Algorithms for Fault - Tolerant Tile Mining (2nd Author) (under review)

**Dynamic Workflow Adjustment with Security Constraints** 

Aug 2016

In Progress

Skills

- Proficient in: C, C++, Java, HTML, CSS
- Familiar with: Python, JavaScript, Assembly, OPL, Node.JS
- Tools Used: Git, Photoshop, Arduino, Socketio, LibGDX, CPLEX, TKinter, Vim, GDB
- Experience in a research environment

**Interests** 

• Basketball, dragon boat, indoor rock climbing, piano, magic