Joseph Phan

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Education Santa Clara University, Santa Clara, CA Sept 2014 - June 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 Santa Clara University, Santa Clara, CA Research Assistant (Data Mining) Nov 2015 - Present **Experience** • 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 Kennedy Elementary School, San Jose, CA STEM Enrichment Instructor Sept 2015 - Dec 2015 Work • 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 Betrayal (Android) Programmer, Network Engineer, and Technical Artist June 2016 - Aug 2016 Published • 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 fun yet challenging gameplay • Participated in team meetings to discuss the architectural design, implementation, and organization Assembled and created an image library using GIMP Publications Exact Algorithms for Fault - Tolerant Tile Mining (2nd Author) (under review) Aug 2016 **Dynamic Workflow Adjustment with Security Constraints** In Progress Skills • Proficient in: C, C++, Java, HTML, CSS • Familiar with: Python, JavaScript, Assembly, OPL, Node.js • Tools Used: Git, GIMP, Arduino, Socketio, LibGDX, CPLEX, OpenCV • Experience in a research environment

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

Interests