

Masayuki I. Tokunaga

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EDUCATION

Pursuing Bachelor of Science in Computer Science

University of California, San Diego

Expected Graduation Date: June, 2016

GPA: 3.390

RELEVANT COURSEWORK

- Advanced Data Structures
- Design and Analysis of Algorithms
- Software Engineering
- Principles of Computer Operating Systems
- Networked Services
- Programming Languages: Principles and Paradigms
- Introduction to Computer Security
- Computer Networks
- Introduction to Computer Architecture
- Database System Principles
- Web Client Languages
- Mobile Programming
- Database System Applications
- Intro to Artificial Intelligence: Search and Reasoning
- Algorithms: Discrete & Continuous Optimization
- Compiler Construction – In Progress

PROJECTS

- **Multiple Flashcard Android App:** Using Android Studio, create an android app which allowed users to create multiple sets of flashcards, and allow two modes for iterating through the cards. Users can Create, Read, Update and Delete both the set of flashcards and individual flashcards. Use JSON Array to store flashcards in phone's storage. *Found at: <https://bitbucket.org/mtokunag/flashcard/src>*
- **Eventful Android App:** Worked in a group to create a mobile client-server app which allowed users to schedule and join events. A database was used to store user and event information, and the app made calls to the database through a webserver in order to store and retrieve data. Facebook login, crashlytics, and google analytics were also used for this app.
- **Web Application on top of Database:** Model an Entity-Relationship Diagram of UCSD and use Microsoft SQL Server, Apache Tomcat, and JDBC to see how applications with extensive data maintenance and querying requirements can be rapidly, cleanly, and efficiently be built with a database system.
- **Webserver in C:** Built a functional server which can handle GET requests in HTTP 1.0/1.1 using C. A multi-threaded approach was used in order to allow multiple requests from multiple clients. In order to allow for persistent connections and pipelining of client requests, timeouts were implemented.
- **Simple Twitter client:** Built a simplified twitter server in order to be familiarized with RPC programming, to gain experience with programming in the Thrift toolkit, and to learn how to communicate between two programs written in two different languages (Python and Java).
- **IOS Application & Website:** Worked in a group to build a IOS Application and Website. Agile and Waterfall methodologies were used, and I was responsible for helping to make the website.
- **Back-end of Boggle Board:** Provided with a list of all possible words, built a search method which can find which words are currently on the board. Used a hash table in order to improve the overall speed of the game.

APPLICATIONS AND SKILLS

- Knowledgeable in Java, C, C++, +Python, SPARC Assembly, HTML/CSS/Javascript, OCaml, Prolog, MySQL, Microsoft SQL.
- Some knowledge in Hadoop MapReduce, Apache Thrift/Tomcat, Verilog, Relational Databases, JDBC and Java Server Pages
- Familiar with Agile and Waterfall methodologies; working in Linux environment, Git.

WORK EXPERIENCE

Computer Science & Engineering Tutor

(Winter 2014)

- Assist students understand the material taught in class: Mathematics for Algorithm and Systems Analysis.