Y. DOROTHY JUNG

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EDUCATION

University of California, Berkeley May 2015
B.A. Computer Science, B.A. French with Honors GPA: 3.6/4.0

Relevant Coursework Computer Graphics, Operating Systems and Systems Programming, Computer Architecture, Computer Security, Computer Networking, Microelectronic Circuits
Randomized Algorithms, Efficient Algorithms and Intractable Problems, Discrete Math and Probability Theory, Linear Algebra, Differential Equations

EXPERIENCE

DreamWorks Animation | *R&D Intern* Redwood City, CA
Jan 2014 – Jun 2014

- Integrated GCC 4.8 and ICC 14.1 compilers into the studio development environment by refactoring existing proprietary rendering software to support C++11 features. (C++)
- Wrote a command-line tool to check for inconsistencies in metadata across ~250 packages of studio software, plug-ins, and third-party extensions for Maya, Houdini, and Nuke. (Python)
- Communicated with Technical Directors and other developers to provide technical support on *How to Train Your Dragon 2*, *Penguins of Madagascar*, and *Home*

Mirixa Corporation | *Engineering Intern* Emeryville, CA
Sept 2013 – Nov 2013

- Generated user stories and test cases to assess functionality of the flagship product. (JavaScript)
- Worked part-time on the front-end team in an agile-waterfall hybrid environment to improve a web-based clinical platform used by commercial pharmacies and pharmaceutical schools.

PROJECTS

Brainability (Illustrator, Photoshop, Java)
Designed an Android application to measure user productivity on a task using data obtained from a portable EEG using Emotiv Insight SDK. Won the *Judges' Choice Award* at a design competition hosted by Emotiv/Pivotal Labs.

3D surface mesh generation (C++, OpenGL)
Subdivided parametric surfaces by interpolating control points defining a set of Bezier curves. Wrote one version for adaptive triangulation and another for uniform subdivision using de Casteljau's algorithm.

Ray tracer (C++)
Wrote from scratch a ray tracer that rendered scenes with shadows and reflections from arbitrary .obj files. Implemented linear transformations including scales and rotations through matrix operations, and outputted images to .png files using lodePNG.

Spam classifier using decision tree learning (Python)
Implemented a random forest classifier to flag e-mails as spam. Used bagging to select random subsets of features and an entropy-based impurity metric to greedily select the splitting rule at each node.

SKILLS

Languages and Libraries	Python, C++(98/11), C, Java, x86 assembly, OpenGL, HTML5/CSS3/JavaScript
Development Tools	Bash shell scripting, gcc, gdb, make, git
Human Languages	French (fluent), Korean (working proficiency)

LEADERSHIP AND ACTIVITIES

UC Berkeley IEEE Student Branch (Institute of Electrical and Electronics Engineers) | *Officer* 2013 – 2015
Organize the bi-annual UC Berkeley Startup Fair. Create flyers and pamphlets in Illustrator.

UC Berkeley French Department | *Tutor* 2012 – 2015
Hold weekly office hours to assist intermediate French students with grammar, speaking, and writing.

Google Women Techmakers Summit in Mountain View, CA | *Conference Participant* 2014