

Diane Yang

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EDUCATION	Harvard University Graduated May 2016 <i>A.B. in Computer Science</i> Selected coursework: Economics & Computation, Game Theory & Economic Applications, Computational Fabrication, Computer Graphics.
SKILLS	Python, Swift, Objective C, JavaScript, HTML/CSS, OCaml, C/C++, Git.
EXPERIENCE	<div><div>Duolingo July 2016 – Present <i>Software Engineer (iOS)</i><ul style="list-style-type: none">• Duolingo is a gamified language-learning app with over 200 million users and the most downloaded education app in the world.• Design and implement monetization features inspired by mobile game mechanics.• Analyze data from A/B tests to decide which features should launch.• Work primarily with Swift, Objective C, and Python.</div><div>Harvard School of Engineering and Applied Sciences Spring 2014 & 2016 <i>Teaching Fellow – CS 51: Abstraction & Design</i><ul style="list-style-type: none">• Taught weekly 1.5-hour sections, held office hours, and graded assignments.• Course taught functional programming, object oriented programming, abstraction, and design patterns using OCaml.</div><div>Addepar Summer 2015 <i>Software Engineering Intern</i><ul style="list-style-type: none">• Implemented front-end features for wealth management platform using Ember.js.• Extended Ember Tables open source JavaScript library to support pivot tables.• Built dashboard for feature related to exporting complex financial data.</div><div>HubSpot Summer 2013 & 2014 <i>Software Engineering Intern</i><ul style="list-style-type: none">• Summer 2014: Improved performance of a suite of user-facing dashboards by rewriting them as Backbone.js apps integrated with backend API.• Summer 2013: Refactored Selenium integration tests using page objects design pattern, making tests more readable, maintainable, and easier to write.</div></div>
PROJECTS	<div><div>The Harvard Advocate (Python, Django) - Built publishing platform for nation's oldest college literary magazine. Also developed internal tool for customer relationship management, enabling the business team to manage donors and subscribers.</div><div>Mesh smoothing (C++) - Implemented half-edge mesh data structure and Laplacian mesh smoothing with cotangent weights.</div><div>4-bar linkage curve matching (MATLAB) - Users draw desired path with Bezier splines. Genetic algorithm outputs linkage that traces similar path.</div><div>Collision simulator (C++, OpenGL) - Simulates dropping hundreds of cubes into a box. Uses grid data structure for $O(n)$ collision detection.</div><div>Get Prepped (JavaScript) - Microsoft Surface app that prepares students for the SATs and college applications. Featured in Microsoft Surface Pro 3 launch event.</div></div>