Jennifer Yip

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Tools Python, Java, SQL, Ruby on Rails, HTML, CSS

EDUCATION

University of California, Berkeley (Berkeley, CA)

Bachelor of Arts, Computer Science

Expected Graduation: 05/2018

Cumulative GPA: 3.5

<u>Technical Coursework</u>: Structure and Interpretation of Computer Programs (CS 61A), Data Structures (CS 61B), Machine Structures (CS 61C), Discrete Math (CS 70), Software Engineering (CS 169), Databases (CS 186)

WORK & COURSEWORK EXPERIENCE

Work & Research

ANOVA – Technology Committee (Berkeley, CA) Web Developer 09/2016 - present Pair programming to restructure and redesign ANOVA's home page HTML, CSS, Ruby on Rails

Designing responsive page layouts and adding membership login capabilities

Banfield Laboratory (Berkeley, CA) **Undergraduate Research Assistant** *09/2015 - present*

Multiple sequence alignment of CRISPR spacers using the Needleman-Wunsch algorithm

Python, R

Building visualization of dataset for later analysis of bacterial strains microevolutions and comparative genomics

Contributed to data collection (next gen sequencing) in Human Microbiome Project observing gut colonization

Analysis of data outputs of various bioinformatics pipelines (QIIME, DADA2)

Lawrence Livermore National Lab (Livermore, CA) Computation Intern 05/2016 - 08/2016

Built pipeline to compare gene data to detect potential of genetic engineering Python, HTML, CSS

Connected gene databases to find impact of genetic composition on virulence/antibiotic resistance

Presented poster at Northern California Computational Biology Student Symposium & LLNL Summer Symposium

UC Berkeley Sociology Department (Berkeley, CA) Administrative Support 09/2015 - 06/2016

Data entry for Sociology Library and managed graduate opportunities WordPress blog

Class & Personal Projects

California Poets in the Schools (CS 169 Project)

Co-Project Manager

Fall 2016

Building publishing platform through agile development methodology with test-driven approach

Ruby on Rails

Building publishing platform through agile development methodology with test-driven approach Web application that provides automation and regulation of content uploads by site users

Gitlet (CS 61B Project) Fall 2015

Implement miniature version control with similar features to git – commit, log, branch, merge Java A Small Database System (CS61B Project) Fall 2015

Implement miniature Relational Database Management System (RDMS) with simple query language Java

EXTRA CURRICULAR ACTIVITIES

<u>Service</u>

ANOVA Site Teaching Assistant 09/2016- present

ANOVA introduces computer science topics to middle/high school students in under-resourced communities Introducing HTML/CSS to students in after school programs at Claremont Middle School (Oakland, CA)

UC Berkeley CS61A Lab Assistant 05/2015-08/2015

CS61A is an introductory computer science class that covers abstraction, trees, recursion, inheritance Assisted students in Office Hours with homework, labs, projects, and test preparation

Student Organizations

AWE (Association of Women in EECS)

Treasurer

01/2016 - present

AWE creates a safe and supportive community for women interested in computer science

Creating and managing budget, handling reimbursements and invoices

Align: Undergrad Society for Computational Biology Co-Founder 11/2015 - present

Align increases awareness of computational biology through workshops and professional development events Organizing events, managing public relations, and increasing online presence through social media