

Ethan Nelson-Moore

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College Address: 040 Cerro Vista Circle, San Luis Obispo, CA 93410-2500

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Education

California Polytechnic State University, San Luis Obispo

Bachelor of Science in **Computer Science**, expected December 2020

Minor: **Biology**

Class Level: Junior

Computer Science GPA: **3.333**

Overall GPA: **3.174**

Skills

Programming Languages: C, Objective-C, Java, Python, Bash, HTML, CSS, JavaScript, ARM and Z80 assembly

Applications: Word, PowerPoint, iMovie, Eclipse (including the old Android SDK), IntelliJ (including Android Studio), Xcode, PyCharm, Git (advanced; including squashing, cherry-picking, multiple remotes)

System Administration: Installation and configuration of Windows 95-10, Mac OS 6-10, and Debian-based Linux distributions such as Ubuntu; compilation of software on Mac and Linux, including the Linux kernel.

Language: Spanish (intermediate level proficiency)

Statistical Analysis: Regression, *t*-test, chi-squared, correlation

Project Highlights

- FindATree, an Android app which enables users to identify trees by answering simple questions; downloaded by over 5000 users since April 2017
- Cross-Species Gene Finder, a cross-platform tool written in Java which searches for similar genes across species using the NCBI database
- Huffman encoder/decoder written in Python for a Cal Poly class project, including my own implementations of array-based and linked lists. My own unit tests cover 100% of the code, including the list implementations.
- ParrotMod, a program which increases the speed of the 2012 Nexus 7 tablet by optimizing the flash storage driver to work around a problem with the memory chip, allowing unusably slow tablets which would normally be discarded to become useful again; downloaded by tens of thousands of users since January 2016

Practicum and Research Experience

Dr. Davide Falessi, Computer Science Department, California Polytechnic State University San Luis Obispo, CA
Summer undergraduate research assistant Jun-Sep 2018

- Collected and analyzed data on the prevalence of bad coding practices (“code smells”) in open source projects
- Created survey to assess programmers’ opinions of the acceptability of various categories of code smells

Andrew Forbes Lab, Department of Biology, University of Iowa Iowa City, IA

Lab assistant Jun-Aug 2015

- Wrote program to automate search for similar genes in closely related species' DNA sequences
- Extracted DNA from insects, and performed PCR and other hands-on lab work as needed

Bio::Neos, Inc Coralville, IA

App developer for medical researchers Jun-Jul 2014

- Created a working prototype of a digital at-home vision test app
- Wrote detailed project plans and daily reports of progress and setbacks

Work Experience

University of Iowa College of Medicine Iowa City, IA

Consultant, simulated patient Jan 2015-Aug 2017

- Educated medical students about interacting with patients with physical disabilities

Sycamore Theatre Iowa City, IA

Ticket taker Nov 2015-Dec 2016

Volunteer Experience and Involvement

- Clubs at Cal Poly: White Hat (computer security), App Development
- Welcome Program: English as a second language tutor for parents of City High School students, 2016
- City High symphony band, marching band, and jazz band: Played cornet and bells/xylophone, 2012-2016

Honors

- Human Rights Youth Award: Awarded by the Iowa City Human Rights Commission for ESL tutoring, 2016
- National Merit Finalist, National Merit FORUM Pharmaceuticals Scholarship, 2016