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# Alex Dao

## Education

2013–2017 B.S in Computer Science, Duke University, Durham, NC, GPA – 3.77.

Dean's List (x5)

# Work Experience

Summer 2016 Software Engineer Intern, FACEBOOK, Menlo Park, CA.

- Optimize memory management and performance in the Facebook and Messenger Android apps on the Core Health team
- Work with Android NDK, diagnostic experimentation, and error reporting pipeline

Summer 2015 **Software Engineer Intern**, VERIZON, Atlanta, GA.

- Develop algorithms to journeymap customer behavior (modeling with big data)
- Work with Teradata, Hadoop, Hive, SQL, and other RDBMS services

2014-Current Android Developer, Freelance and Personal.

Lumivote

- o Full stack development account syncing with website, database management, external APIs
- Libraries: Android Support, Picasso, Otto, Butterknife, OKHttp, Retrofit, Gson, etc.
  Genetics and Evolution App
- Contracted app for the Duke and Coursera course BIO202: Genetics and Evolution
- o Implements animations, graphing, and genetic algorithms

2014-Current **Teaching Assistant**, DUKE UNIVERSITY, Computer Science and Math Department.

- TA for Discrete Math, Data Structures and Algorithms, and Operating Systems
- Taught a weekly recitation/discussion section for each class

#### Research

2015 Computer Science Lab, Research Assistant.

Worked with **Prof. Bruce Donald** to computationally design proteins, using graph theory and branch pruning algorithms for future applications in HIV drug delivery. Coded in Java and open-source on GitHub.

2014–2015 Biomedical Engineering Lab, RESEARCH ASSISTANT.

Worked with **Matt Berginski** and **Prof. Brenton Hoffman** to analyze biomedical images using segmentation algorithms, object tracking, and various types of blob analysis in Matlab.

## Skills

Advanced Java, Android Development, C

Proficient Lisp (Scheme/Racket), MIPS Assembly

Casual Python, C++, HTML/CSS

Tools / Android Studio, IntelliJ, Eclipse, \*nix Environments, Git, XML/XQuery/XPath, Gradle, Frameworks JSON, REST, Flask

# Awards and Leadership

- 2016 President Duke ACM
- 2015 **1st Place** HackDuke (Hackathon)
- 2015 **2nd Place** International Collegiate Programming Contest Divisional
- 2014/2015 **Top 30/100** Duke Startup Challenge
  - 2012 National American Junior Academy of Science Fellow