# Daniel Y. Choi

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#### Education

• University of British Columbia

Vancouver, BC

Bachelor of Computer Science, second degree program

May 2015 – Present

- GPA 4.16 (in-major), expected graduation: Sept. 2017

Bachelor of Science with Distinction, Integrated Sciences

Sep. 2010 – May 2015

- GPA 3.98, concentration in biochemistry & human physiology

### Core Technical Skills

Languages: Java, C, C++, C#\*, Racket, Matlab

Web: JavaScript\*, TypeScript\*, HTML, CSS\*, MeteorJS\*

Tools & Frameworks: Git, LATEX, MongoDB\*, JDBC\*, MySQL\*

\*currently learning

# **Technical Experience**

• University of British Columbia

Vancouver, BC

CS teaching assistant

Sep 2015 - Present

- Teaching labs and holding office hours for over 120 students in an introductory CS course
- Topics focus on propositional and predicate logic proofs, discrete math, and models of computer systems
- Collab-A-Comic!

Course project

MongoDB, Express, AngularJS, NodeJS

Jan 2016 – Present

- Developing an online collaborative comic book web application that lets users create comics by uploading panels to new or existing projects, and lets users search for and subscribe to comics and other users
- Learning to implement Agile software development, wrote 11 user stories in the product backlog
- Kiki's Delivery Service

Course project

Java, JDBC, MySQL

• Bicycle Trek

Jan 2016 - Present

- Designing and implementing a relational database application from scratch that models a parcel delivery
- Interface will be able to handle multiple user types, and will have at least 10 different queries
- Currently making Entity-Relationship diagrams

 Candoll Global Game Jam

Unity, C# Ian 2016

- Developed a 2D top-down game during a 48-hour hackathon
- Scripted player movement, UI, and basic enemy AI, implemented cutscenes

 Haikuthon **UBC BCS Hackathon** 

JavaScript, MeteorJS, Facebook API

Nov 2015

*Jul* 2015

- Built a real-time collaborative haiku poem writing platform, with automatic syllable checking
- Implemented online users list using MongoDB and Facebook API

JavaScript, MeteorJS, Google Maps API

Code It Forward Hackathon

- Created a web app for cyclists that traces the user's path on a map, and displays training metrics such as

distance, speed, and elapsed time - Designed UI, created InVision prototype, and implemented GPS-tracked polyline drawing

#### Daniel Y. Choi

• Mind the Gap

Course project

Java, Android Studio, Transport for London Unified API

Jul – Aug 2015

- Built an Android transit app that uses the Transport for London API to display real-time arrivals and station data on a map of the city
- Implemented JSON parser, utilized user geolocation, implemented map overlays for stations and railways, wrote JUnit tests for every method

# **Additional Experience**

• Centre for Molecular Medicine and Therapeutics

Vancouver, BC

Undergraduate researcher

*May* 2012 – *Mar* 2014

- Conducted diabetes and lipid metabolism research by experimenting on a nematode model

• Phi Delta Epsilon International Medical Fraternity

Vancouver, BC

Chapter president

Mar 2013 – Mar 2014

- Provided guidance to a team of 8 executives and chairmen, and over 30 members
- Raised over \$2000 for Children's Miracle Network, organized ethics debates, shifts at a soup kitchen, and mentoring events with physicians

#### **Honors and Awards**

UBC Science Scholar	2015
UBC Dean's Honor List	2010 - 2015
UBC Summer Research Scholarship	2013
Child and Family Research Institute Summer Research Scholarship	2013
UBC President's Entrance Scholarship	2010

## **Publications**

Hou, N., Gutschmidt, A., **Choi, D.**, Pather, K., Shi, X., Watts, J., ... Taubert, S. (2014). Activation of the endoplasmic reticulum unfolded protein response by lipid disequilibrium without disturbed proteostasis in vivo. *Proceedings of the National Academy of Sciences*, 22(111), E2271-80. doi:10.1073/pnas

**Choi DY**, Hou NS, Taubert S. Characterization of fatty acid genes required for maintaining proteostasis in the endoplasmic reticulum and mitochondria. Poster session presented at: Child and Family Research Institute Summer Student Research Program 2013 Poster day.

## Extracurricular activities

Guitar instructor for charity fundraising	2014
UBC orientations leader	2010 – 2013
Soup kitchen volunteer	2011 – 2013
HIV/AIDS ward volunteer	2011 – 2013
Hospital volunteer team leader	2011 – 2012