

# MICHELLE DENG

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## ABSTRACT

Driven individual with a background in cognitive science, computer science, HCI, and design; seeking full-time positions in software engineering and data science.

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## EDUCATION

### Carnegie Mellon University

M.S. Educational Technology and Applied Learning Science (METALS)

*August 2018*

### Carnegie Mellon University

B.S. Cognitive Science, Minor Computer Science

*Dean's List High Honors, Fall 2016 & Spring 2017*

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## EXPERIENCE

### Teaching Assistant at Carnegie Mellon University

Pittsburgh, PA—Spring 2018

- Teaching assistant for the CS course Practical Data Science. Responsibilities include: holding office hours, answering student questions, helping with assignment design, preparing for homework recitation sections, and helping to grade homework assignments.

### Teaching Assistant at Carnegie Mellon University

Pittsburgh, PA—Fall 2017–Spring 2018

- Teaching assistant for the HCI course Designing Human-Centered Software. Responsibilities include: grading homework assignments, in-class assignments, and quizzes, as well as attending class to evaluate and user-test students' projects.

### Research Assistant for OpenChirp

Pittsburgh, PA—Spring 2017

- Used Angular2, HTML, and CSS to code the landing page and various features for the website and dashboard for an IoT device based on a stable REST API backend.

### Software Engineer Intern at InsideSales.com

Provo, UT—Summer 2016

- Built a new monitoring app for the data science team using Angular 2 to monitor the performance of training models for lead-scoring over time.
- Coded a Python backend to pull and organize data from HBase, store it in MongoDB, then serve it on a Flask app to be retrieved by the Angular 2 app.

### Software Engineer Intern at Waterfall

San Francisco, CA—Summer 2015

- Built an automated test framework for Waterfall SMS Platform by writing unit tests using JUnit to verify text messages users sent and received via the platform were captured in the database, and used Selenium to create automated tests for the text messaging campaign process on the platform's frontend.
- Constructed in Photoshop a new message process diagram that shows the messaging cycle between the user and the system. Created ERD's for the backend databases.

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## RESEARCH

### Research Assistant for SCIPR Project at Articulab

Pittsburgh, PA—Fall 2016–Spring 2017

- Designed and implemented Wizard of Oz experiment, user interface, and its backend programs using Unity, Virtual Human Toolkit, BEAT, SmartBody, and Text-To-Speech technologies.
- Performed independent research relating to curiosity, scientific inquiry, and multiparty interaction in learning contexts by conducting literature review and formulating a research question, preparing data for analysis, and carried out analysis to write up results in a final paper.

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## PROJECTS

### 4U

TartanHacks 2017

- Used the IBM Watson SDK, Yelp API, and OpenCV to develop a voice-controlled, facial recognition personalized assistant that can help plan budget and recommend places to eat based on stated food preferences.

### purify

Spring 2016

- Developed a web application using the SoundCloud API to filter a user's SoundCloud feed based on an input song using Node.js and Express framework

### Waterfall Fit

Waterfall, Summer 2015

- Volunteered to construct and lay the groundwork in building a Django web application in Python to log users' fitness activities and enable peer competition based on the intensity and duration of their exercises.
- Designed and implemented the backend database with MySQL to store user, account, and exercise information extracted from their email accounts and submitted through forms. Used Google's OAuth2 for the app's authentication protocol and formatted UI with HTML.

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## TECHNICAL SKILLS

### Proficient

Python, Java, SML, C, JUnit, Angular2, Arduino, L<sup>A</sup>T<sub>E</sub>X, Adobe Photoshop, OS X

### Experienced

HTML/CSS, Javascript, Android, MongoDB, Django, Selenium, VIM, IntelliJ, Linux, Windows, Git