# **JIEXIN GUO**

2357.5 Tilbury Avenue, Pittsburgh, PA 15217 ♦ jiexing@andrew.cmu.edu ♦ Cell Phone: 412.353.5950

**EDUCATION** 

Carnegie Mellon University Pittsburgh, PA

Master of Science in Electrical and Computer Engineering

May 2016

Sun Yat-Sen University Guangzhou, China

Master of Engineering (Computer Technology)

May 2016

Sun Yat-Sen University Guangzhou, China

Bachelor of Engineering in Electronics and Communication Engineering

June 2014

**PROJECTS** 

# Feature based melanoma recognition from skin images

**NOVEMBER 2014-NOW** 

- Implemented Active Contour segmentation to segment the lesion
- Applied neural network to classify melanoma and non-melanoma images
- 10-fold validation and ROC curve analysis are used to verify the performance of the classification
- Received an overall classification accuracy of more than 88%

### Basic Speech Recognition System, In Speech Recognition

**FALL 2014** 

- Implemented recording voice process, extracting MFCC feature and digit recognition using Dynamic Time Warping algorithm
- Can recognize single digits successfully, less successful in continuous digits' recognition

#### Lineloss Calculation based on Distributed Platform,

**SUMMER 2014** 

- Developed algorithms to compute the electric loss on transporting lines based on Hadoop and Storm distributed platform
- Became a subproject of a business project collaborate with China Southern Power Grid

#### **iGEM 2013 software**, International Genetically Engineered Machine Competition

**FALL 2013** 

- Built a webserver with FLASK python framework and SQLite database to simulate experiments
- Charted plasmid sequence in an intuitive and detailed way on webpage
- Best Software Project of iGEM 2013 world Jamboree

#### Genomic Advisor, social connection between 23andme

**SPRING 2013** 

- Genomic Advisor is an app that can predict drug allergy and genetic diseases
- Imported user gene information from 23andme to Genomic Advisor's database
- Translation the app between English and Chinese

# **iGEM 2012 software,** International Genetically Engineered Machine Competition

FALL 2012

- Core programmer of this project
- Develop a toolbox for biologists to view gene or biobrick information and simulate experiments
- Two individual awards of iGEM 2012 world Jamboree

#### **A**WARDS

# China National scholarship for graduate students,

November 2014

RELEVANT COURSES

How to write fast code Speech Recognition

Foundations of Computer Architecture Biomedical Imaging & Analysis

SKILLS

**Application Software:** MATLAB, Netbeans, Visual Studio, Eclipse **Programming Languages:** C++, Java, Python, HTML, JavaScript