

# Enmao Diao

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## OBJECTIVE

To apply for graduate school

## EDUCATION

**Georgia Institute of Technology, Atlanta, GA,**

08/2012 - Present

B.S. in Computer Science,

Expected in 05/2016

B.S. in Electrical Engineering,

Expected in 05/2016

Dean's List Overall & Major GPA: 4.00 / 4.00

## SKILLS

- **Programming:** VHDL/Verilog, C/C++, Matlab, Java, Python, PHP, MySQL, R, Android and Web development.
- **Hardware:** Programming experience with Altera FPGAs, and mbed micro-controller.
- **Software:** Proficiency in Hadoop, ModelSIM, Altera Quartus II Suite, Matlab, MATHCAD, MULTISIM, and LTSpice. Written proficiency in LaTeX and Microsoft Office. Experience in Linux and Windows operating systems.
- **Concept:** FPGA Development, Telecommunication, Digital Circuit Design, Digital Signal Processing, Big Data, Data Analytics, Mobile Application and Web Application development.
- **Language:** Native speaker of Mandarin, fluent English.
- **Communication:** Fluent communication and technical written skills, and self-motivated in various environments.

## EXPERIENCE

**Undergraduate Research Assistant, Georgia Tech, Atlanta, GA,**

Prof. Elliot Moore II

05/2014 - Present

- Implement polyphonic and monophonic melody extraction algorithms.
- Conduct Technical Review on Audio Melody Extraction based on the results from annually held conference MIREX (the Music Information Retrieval Evaluation eXchange).
- Develop monophonic pitch transcription mobile application.

**Undergraduate Research Assistant, Georgia Tech, Atlanta, GA,**

Dr. Jeff Young

08/2015 - Present

- Create an FPGA-based framework for using the OpenHMC (Hybrid Memory Cube) interface for hybrid memory cubes as a research platform.

**Undergraduate Research Assistant, Georgia Tech, Atlanta, GA,**

Prof. Hyesoon Kim

01/2015 - 05/2015

- Implement Cellular Neural Network (CNN) on Altera ModelSIM.

**Undergraduate Teaching Assistant, Georgia Tech, Atlanta, GA,**

ECE 2031, Digital Design Lab

05/2014 - 08/2015

- Assist twenty students learning FPGA, oscilloscope and implementing a simple computer using VHDL.

**Writer, Georgia Tech, Atlanta, GA,**

Blueprint the Georgia Tech Yearbook

08/2012 - 12/2012

- Write portraits for SGA Undergraduate President and Campus Football cheerleader.

## PROJECTS

**Big Data Analytics: Distributed Machine Learning Algorithms, Georgia Tech, Atlanta, GA**

08/2015 - Present

- Test the performance of Classification and Clustering algorithms like Naïve Bayes and Random Forest on Mahout and Spark with Million Songs and MNIST dataset and Amazon EMR.

**Autonomous Sailboat for Penguin Tracking, Georgia Tech, Atlanta, GA,**

08/2015 - Present

- Design and implement unmanned sailboat involving embedded system, power, and web development.

**Library management system, Georgia Tech, Atlanta, GA,**

01/2015 - 05/2015

- Design and implement a Database system using PHP and MySQL.

**NS2 simulation and performance evaluation of TCP, Georgia Tech, Atlanta, GA,**

03/2015 - 05/2015

- Conduct simulations to compare the performance of various flavors of TCP.

**Trip Planner web application design, Georgia Tech, Atlanta, GA,**

05/2014 - 08/2014

- Develop a trip planner using Google and Yelp API to retrieve information of restaurants and hotels.

**Infrared Signal-Controlled DE2Bot Design, Georgia Tech, Atlanta, GA,**

01/2014 - 05/2014

- Work in a group of 4 to design a warehouse robot navigation system.

## AWARD

**President Undergraduate Research Award (PURA), Georgia Tech, Atlanta, GA,**

06/2015

**Golden ticket of the InVenture Prize at Georgia Tech (2016), Georgia Tech, Atlanta, GA,**

12/2015