# Marvin J. Andujar E-mail: andujarm@kean.edu

#### Education

**B.S. Computer Science and B.A. Mathematical Sciences** (Dual Major)

Degree expected 05/12

Kean University, Union, NJ

**Dean's List:** Academic achievement, GPA 3.45 or higher in a semester (Spring 2009)

#### **Research Interests**

Human Computer Interaction (HCI), Brain Computer Interface (BCI), Database Management

## **RESEARCH PROGRAMS**

### **Collaborative Research Experience for Undergraduates (CREU)**

Kean University – Computer Science Department Cohort 2011-2012

### Distributed Research Experience for Undergraduates (DREU)

Clemson University – School of Computing REU Cohort 2011

### Research Experience for Undergraduates (REU)

Clemson University – School of Computing REU Cohort 2010

## Ronald E. McNair Scholars Research Project

Kean University - McNair Cohort 2008 & 2009

## **Research Experience**

**Brain Computer Interface (BCI):** Using the non-invasive "Emotiv Epoc" BCI device, conducted studies of people's engagement levels using an application written by the research group (the algorithm used is proprietary of the device vendor). The purpose of the engagement study is to determine how the brain waves of the users react while learning visually vs. reading.

**iTECH:** Worked on a database where the car answers any type of question asked by the user and provide a reference page to the manual of that specific car (e.g. BMW, Mercedes, etc.). My duties were to write queries to access the database, make an external button interact with Skype where the user can answer and make calls with the button via Skype, and write a Java application to make the button to work on a mac.

**VoiceText:** Help prepare studies using a car simulator and a real car once the application was written to determine how much distracted people get while using this application. "VoiceText" is an application written by Dr. Juan Gilbert (Professor at Clemson University) where the user does not need to look and touch the phone in order to text. The user gives voice commands and the application converts the oral commands to text. The purpose of this application is to reduce the number of car accidents.

**Alive vs. Java:** Conducted studies to determine which programming language is helping students to learn programming techniques better in introductory programming courses.

**Carbon Sequestration:** Compared and analyzed different interfaces in order to develop a new interface for Biologists and other Scientists. The interfaces are used to measure carbon data.

### **Honors & Awards**

#### National Science Foundation (NSF), Selected 2009

• Competitive Merit Scholarship from Computer Science Department at Kean University Ronald E. McNair Post Baccalaureate Achievement Program, Selected 2008

 Dedicated to the preparation of first generation college student for research and doctoral degree

### Louis Stokes Alliance for Minority Participation Program (LSAMP), Selected 2010

• Dedicated to increase the number of professionals in **STEM** fields from minority groups who are traditionally underrepresented.

# Hispanic Association College Employees Scholarship, 2010

• Scholarship awarded for potential Hispanic employees

## Honorable Mention for Poster Presentation, 2009

• Recognized for outstanding poster presentation

# Richard Tapia Celebration of Diversity in Computing, 2009

• Full Scholarship to attend Richard Tapia conference 2009

# Smart Grant 3<sup>rd</sup> & 4<sup>th</sup> Year, 2009 - 2010

• Grant awarded for good academic achievement

### **Epsilon Epsilon Omega (EEO)**

• Academic Achievement, GPA 3.0 or higher a semester, (Spring 08-10 & Fall 09)

### Leadership/Membership

**Vice-President** (Fall 2011 – Spring 2012)

### Senior Class of Kean University

- Assume President's obligations
- Fund scholarship money for future seniors

#### President

### **Association for Computing Machinery (ACM)** (Fall 2009 – Spring 2011)

- Develop chapter programs
- Led the group to achieve groups of the month twice in a period of two years
- Received best group workshop/events out of 20 groups on campus

### **Director of Public Relations**

# **Association for Computing Machinery (ACM)** (Fall 2008 – Spring 2009)

- Distributing any printed publication and meeting announcements
- Composing write-up of last month's speaker

#### **Committee Member**

#### Ronald E. McNair Post Baccalaureate Achievement Program (2009 – Present)

- Recruit new potential scholars
- Interview new incoming students

#### **Student Member**

### Society of Hispanic Professional Engineers (SHPE) (2009 – Present)

New Jersey Institute of Technology (NJIT) Branch

### **Computer Skills**

Programming Languages: Java, C, HTML, CSS, Alice

Database: MySQL

Microsoft Office: Word, Excel, Visio, PowerPoint, Access, Publisher

Adobe Applications: Illustrator, Photoshop, Dreamweaver

Brain Computer Interface (BCI) Devices: Emotiv, NeuroSky, OCZ Technology

Operating Systems: Windows, Linux/Unix, Mac OS X

Bilingual: English and Spanish