

# Flavia Cavalcanti

917-460-6733  
[flaviarc@iastate.edu](mailto:flaviarc@iastate.edu)  
[flaviarc.public.iastate.edu](http://flaviarc.public.iastate.edu)

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## **Education**

Iowa State University  
Computer Engineering  
GPA: 3.59  
Expected Graduation date: May 2016

## **Activities**

### **Iowa State University Honors Program**

Member (August 2012-Current)

### **Latinas in Computer Engineering** (2013)

### **Lunabotics Club** (Spring 2013-Current)

- NASA competition. Entails the development of a robot with near/complete autonomy.
- Member of the Control's Group: developing the robot's autonomy

### **Digital Women**

- Club for women in technical fields

### **Information Insurance Student Group**

- Group foccused on cyber security
- Cyber Defense Competition

### **Institute of Electrical and Electronics Engineers** (IEEE) (2012-present)

### **Game Development Club** (Fall 2012-Current)

## **Side-Projects:**

*Knight and Knaves Logic Game*: A text based game written in python using TkInter graphics for the user interface. The game itself has over 10,000 lines of code, bearing four different storylines and puzzles.

*Mouse trail*: A java applet that uses points and vertices to generate a multicolored "thread" that follows your mouse around.

*Jewels Game*: This program uses Java's GUI to generate a checkerboard. The user could then swap the individual squares around to make sets of three or more, earning points, and causing the tiles on top to collapse and generate other different colored pieces.

## **Work Experience**

Mechanical Engineering Researcher (BioRenewable Laboratory) – *Paper-based Microfluidics for Energy Applications* (Fall 2013- present)

The objective of this research is to develop a cheap, environmentally clean energy source, while acquiring a continuously operating microfluidic microbial fuel cell (steady current).

Currently working with paper-based microfluidics for energy applications.

Calculus II Tutor, Iowa State University – Held weekly sessions to teach students different methods of solving Calculus II problems. I taught a series of helpful tips and tricks not taught in class. (Spring, 2013)

Destination Iowa State Leader, Iowa State University – Led a group of fifteen students around campus, helping them to understand their future as a college student . (Fall, 2013)

## **Skills**

- Multi-lingual: Fluent in Portuguese, English, and Spanish. Currently pursuing French and Mandarin.
- Programming Languages: Java, Python, HTML, CSS
- Linux, Microsoft products
- Blender, AutoCad, Eclipse, BlueFish, Gimp

## **Awards**

Presidential Award for Academic Achievement (2011)

Dean's List

International Ambassador's Scholar

Honors Grant- Funded by Iowa State University.