

Wouldn't Take Nothing For My Journey Now: Reflections and Adventures in Engineering

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Colloquium

Women in Science & Mathematics
Minority Mentoring in Mathematics &
Science

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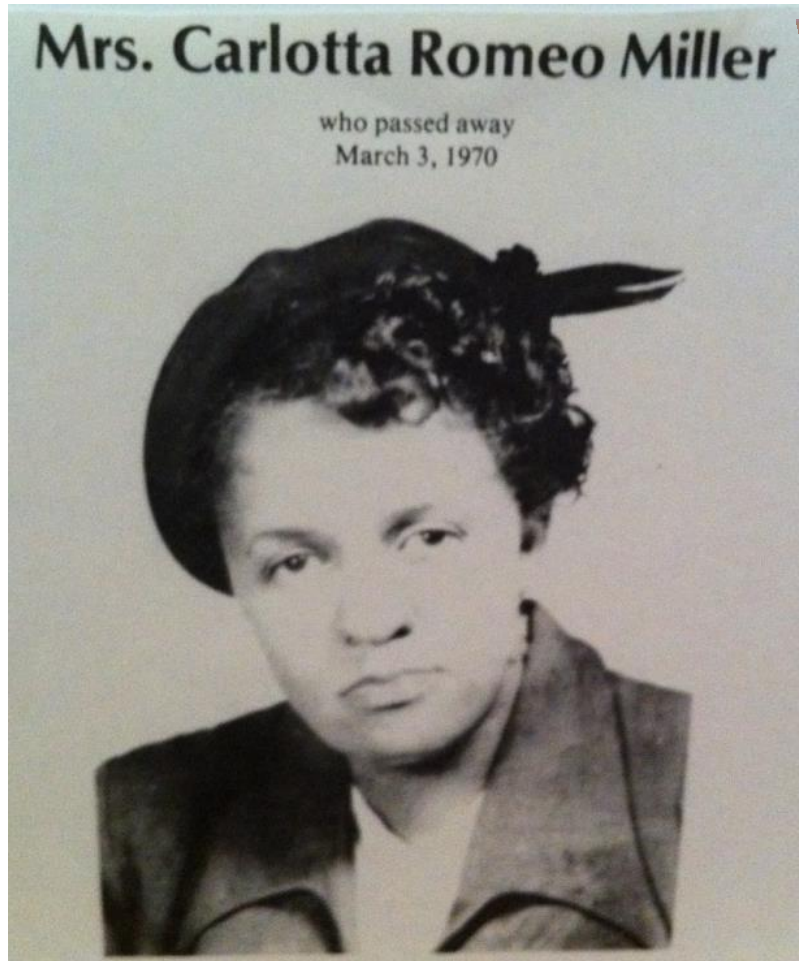
Make your purpose your passion

“A person is the product of their *dreams*. So make sure to *dream* great *dreams*. And then try to live your *dream*.”

-Angelou



Who am I? How did I get here?



EDUCATION

“Intelligence plus character-that is the goal of true **education**.”

— Martin Luther King Jr.



CHARACTER



“The ultimate measure of a man is not where he stands in moments of comfort and convenience, but where he stands at times of challenge and controversy.”

— Martin Luther King Jr.

DISCIPLINED



"We are our biggest obstacles. It is much easier to do battle with others and with society than to fight our own nature." Dannis Prager

Focus, Motivation & Persistence

Nothing will work unless you do.

-Angelou

DEDICATED

“If you accept the expectation of others, especially the negative ones, then you will never change the outcome”

-Maya Angelou



DRIVEN



“Whatever your life's work is, do it well. A man should do his job so well that the living, the dead, and the unborn could do it no better.”

-Martin Luther King Jr

DECISIVE

*“We may encounter many
defeats but we must not
be defeated.”*

-Maya Angelou



A DREAM REALIZED



“We are not makers of history. We are made by history.”

-Martin Luther King Jr.

EDUCATOR

“You can only become truly accomplished at something you love. Don't make money your goal. Instead, pursue the things you love doing, and do them so well that people can't take their eyes off you. All the other tangible rewards will come as a result.”

-Maya Angelou



FAITH

“Faith is taking the first step, even when you don’t see the whole staircase.”

-Martin Luther King Jr.



SERVICE

“Almost always, the creative **dedicated** minority has made the world better.”

-Martin Luther King Jr.



ROSE-BUD

Rose Building Undergraduate Diversity



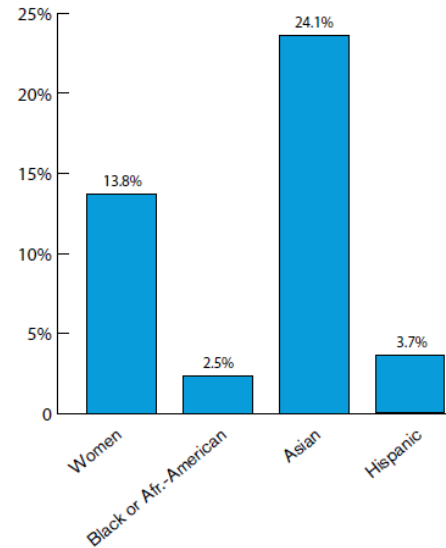
“What you're supposed to do when you don't like a thing is change it. If you can't change it, change the way you think about it. Don't complain.”

-Angelou

PRIME THE PIPELINE



PERCENTAGE OF WOMEN AND MINORITY FACULTY, 2002-2011*



	Women	African-American	Asian	Hispanic
2002	9.2%	2.0%	17.8%	3.0%
2003	9.9%	2.2%	19.2%	3.1%
2004	10.4%	2.3%	20.2%	3.2%
2005	10.6%	2.4%	20.9%	3.2%
2006	11.3%	2.4%	22.0%	3.3%
2007	11.8%	2.5%	22.6%	3.4%
2008	12.3%	2.5%	22.7%	3.5%
2009	12.7%	2.5%	23.3%	3.5%
2010	13.2%	2.5%	23.9%	3.6%

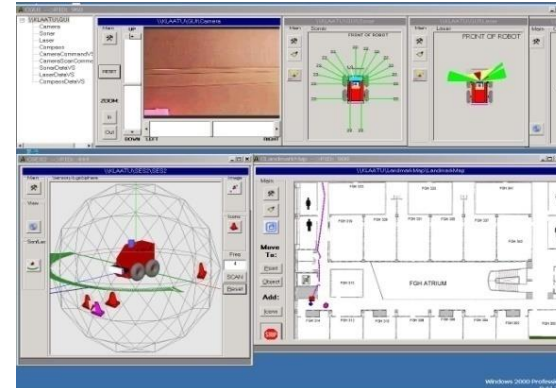
*Note: Includes faculty data from University of Puerto Rico, Mayaguez, Polytechnic University of Puerto Rico and Turabo University

ASEE Engineering By The Numbers 2011

“Our lives begin to end the day we become silent about things that matter.”

-Martin Luther King Jr

Mobile Robotics/Human-Robot Interaction



Robotics Education



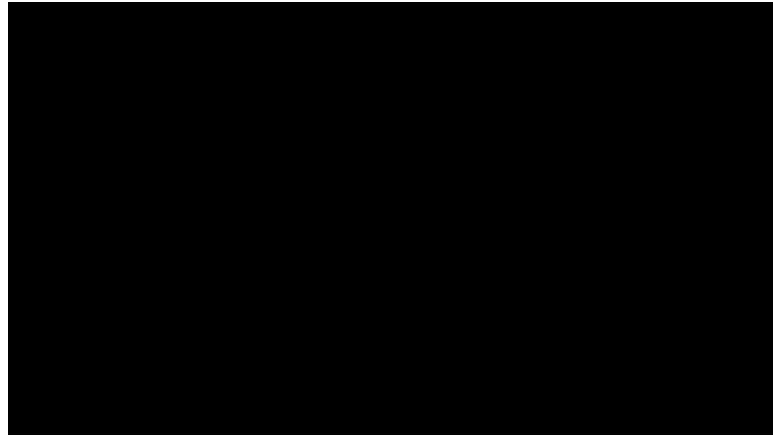
ROBOTICS MINOR



Freshman Design & Programming

Lego Robots/Create Robots

ROBOWL-A-RAMA



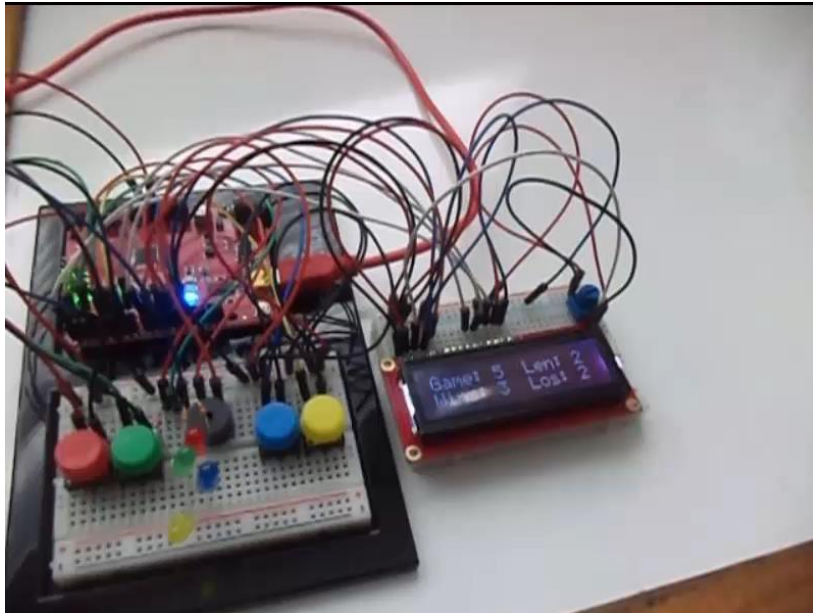
ROBOT RAT RACE



Freshman Design & Programming

Arduino Microcontrollers

SIMON SAYS SPECTACULAR



ROBUNNY RUMBLE



HRI Concepts

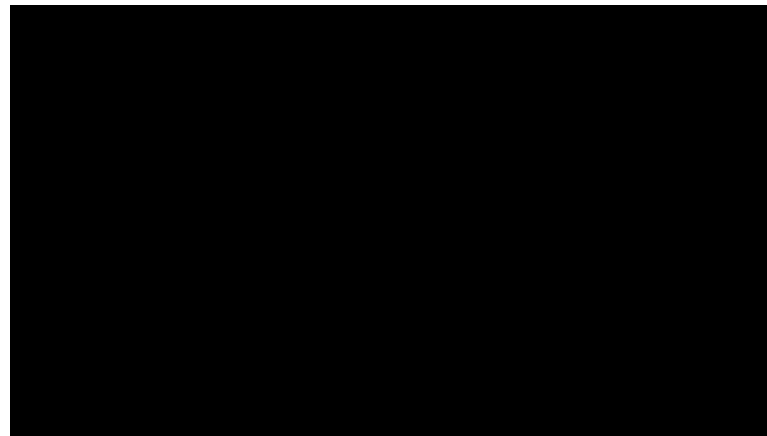
SEARCH AND RESCUE



MUSIC MACHINE

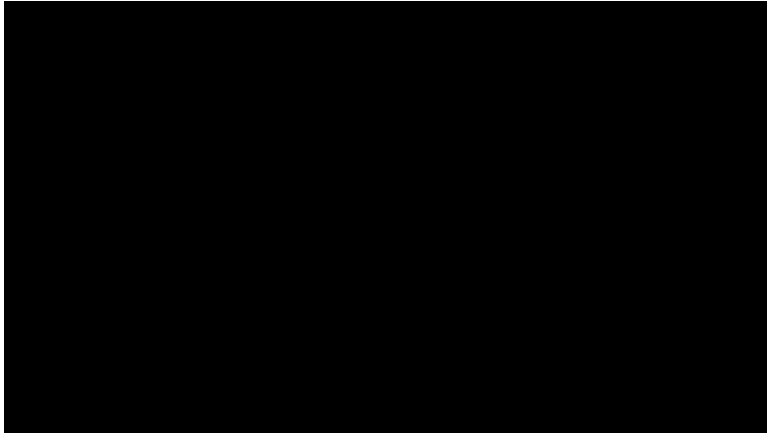


MARCO POLO

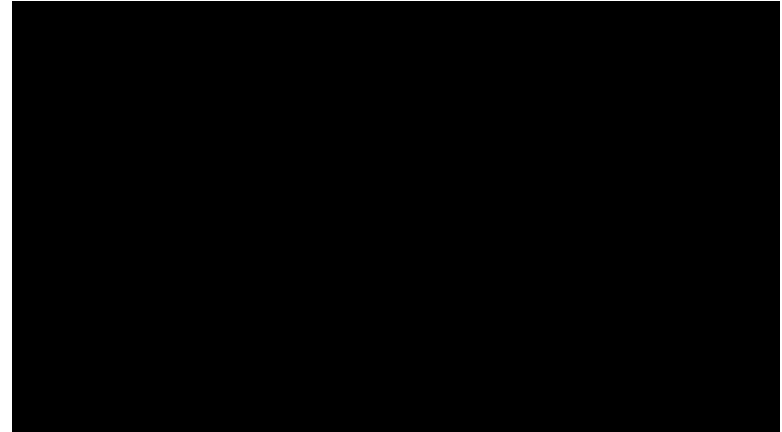


Mobile Robotics AI Concepts

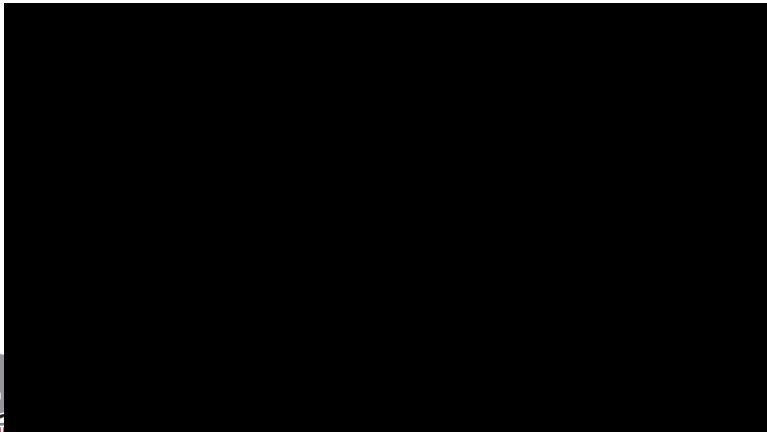
OBSTACLE AVOIDANCE



WALL FOLLOWING



LIGHT CONTROL



**LOCALIZATION/MAPPING/
PATH PLANNING**



Student Research

COLOR TRACKING



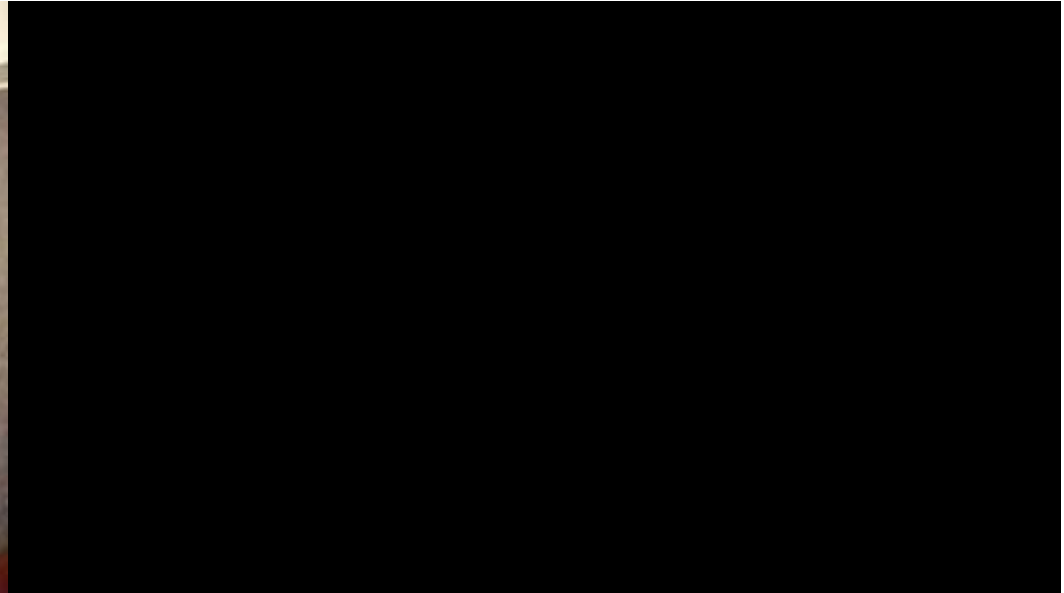
REMOTE CONTROL



Student Research

Visual and Gripper Feedback

Maze Algorithms



FINAL THOUGHTS

“I've learned that people will forget what you said, people will forget what you did, but people will never forget how you made them feel.”

-Maya Angelou

“You alone are enough, you have nothing to prove to anybody.”

-Maya Angelou

