

# A. Giovanni Gonzalez

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## OBJECTIVE:

A Co-op or Internship position in design and analysis of control systems or a position in the business sector of an engineering firm involved in product management, marketing, or business development - Willing to relocate and travel

## EDUCATION:

### **UNIVERSITY OF CALIFORNIA, BERKELEY**

M.S. MECHANICAL ENGINEERING, December 2004

Major GPA: 3.78 / 4.0

MANAGEMENT OF TECHNOLOGY (MOT) certificate, Hass Business School, December 2004

B.S., MECHANICAL ENGINEERING - Honors – Cum Laude, May 2002

Major GPA: 3.74 / 4.0, overall GPA: 3.70 / 4.0

**Fundamentals of Engineering (FE) certified**, State of California, June 2002

**MOUNT SAN ANTONIO COLLEGE**, Walnut, CA, - Major GPA: 3.72 / 4.0, June 1998 - May 2000

Completed Lower Division coursework

### *Related Courses:*

- Advance Control Systems I & II
- Control of Non-Linear Dynamic Systems
- Mechatronics
- MicroProcessor-Based Design of Mechanical Systems
- Automatic Control Systems
- Research Design
- Management of New Product Development
- Venture Design: The Startup Company
- Technical Communication
- Engineering Graphics
- Intro to Microelectromechanical Systems (MEMS)
- Business Fundamentals for Engineers

## COMPUTER SKILLS:

**Matlab, Simulink, AutoCAD, Java, LabView, SolidWorks, Microsoft Office**

## RELATED EXPERIENCE:

**Graduate Student Researcher**, *University of California, Berkeley*, Professor Roberto Horowitz, 9/03 – 5/04

- Formulate and implement mechatronics solutions for media handling systems that will allow accurate steering of the media along three in-plane degrees of freedom, while maintaining high throughput and robust performance to a wide variety of media characteristics for the Control Strategies for Media Handling in Copier and Printer Machines project
- Develop a fully functional rapid-prototyping research and instructional platform. This platform will be re-configurable and capable of testing in real-time, and with electro-mechanical hardware, a variety of multivariable, nonlinear and hybrid control methodologies

**Undergraduate Researcher**, *University of California, Berkeley*, Professor Arun Majumdar 1/02 – 5/02

- Developed software for an electrophoresis microchip using LabView
- Devised a method for applying vacuum/suction methods for microchannels
- Tested microchannels of a microfluidic device for electrophoretic separation of macromolecules such as DNA and proteins in aqueous solution

**Research Apprentice (Honors Research)**, *University of California, Berkeley*, Professor Li-wei Lin 1/01 – 11/01

- Designed a jig used in vacuum packaging for Microelectromechanical Systems (MEMS)
- Machined various parts for different jigs
- Performed and analyzed experiments with MEMS resonators and various MEMS systems

## OTHER EXPERIENCE:

**Supplemental Instructor**, *Mount San Antonio College • Walnut, CA* 1/03 – 5/03

- Led discussion and study sessions for Physics 4C (Engineering Physics 3).
- Prepared lectures and guided students through course

**Assistant Manager/Tutor, The Learning Plaza** • Phillips Ranch, CA

7/99 – 5/03

- Advertised and promoted The Learning Plaza, recruited, trained and supervised tutors, managed in absence of Director, and dealt with dissatisfied customers. Processed invoices, opened and closed business regularly, tutored high school and elementary students with various science based and mathematical subjects

**Tutor, The Tutoring Center** • Berkeley, CA

1/02 - 5/02

- Tutored high school and college students in advance math and science subjects

**PROJECTS:**

- **BayLink**, Venture Design Project: Designed a business plan for a laptop rental company
- **Sorting Train System**, MicroProcessor Design Project: Designed, implemented and tested a computer program using JAVA that controlled motors to sort the cars of incoming trains
- **Snooper Bio-watch sensor prototype**, Mechatronics Design Project: Design of a bio-watch for the detection of Biochemicals
- **Liquid Time**, Venture Design Project: Designed a business plan for a fashion liquid watch invention

**HONORS:**

- **National Science Foundation Graduate Fellowship** – Honorable Mention (2004)
- **International House Room and Board Grant** – University of California, Berkeley (2004)
- **Berkeley Edge (NSF-AGEP) Fellowship**, University of California, Berkeley (2003)
- **International House Fellowship**, University of California, Berkeley (2003)
- **Departmental Citation Award**. – Top student of ME Department for Undergraduate Studies nominated by faculty in the Department, University of California, Berkeley (2002)

**LEADERSHIP/ACTIVITIES:**

- **Activities Officer**, Latino/a Association of Graduate Students in Engineering and Sciences (LAGSES)
- **President/Activities Chair**, Pi Tau Sigma Mechanical Engineering Honor Society
- **Activities Officer**, Tau Beta Pi Engineering Honor Society
- **President**, Alpha Gamma Sigma State Honor Society
- **Member**, nationally recognized Mt. SAC Speech and Debate team
- **World Traveler**, backpacked through 10 cities in Mexico during summer of 2003, backpacked through 7 cities in the East Coast for one month during spring 2003, backpacked through 27 cities in Europe during summer of 2002

**LANGUAGES:**

- **Spanish** (Verbal and written) and **French** (Verbal)