

AHMAD BEKIR
20720 Napa St.
Winnetka, CA 91306
Tel (818) 586-3185
Email: acbekir@yahoo.com

EDUCATION:

- . Bachelor of Science in Engineering at CSUN, 1994
- . Masters Degree in Electrical Engineering at CSUN, 1996
- . EEE Degree in Electrical Engineering at USC, 2001
- . Ph.D. Degree in Electrical Engineering at USC, Dec. 2004
On the Nonexistence of Counterexamples to Sophie Piccard's Theorem, Ph.D. Thesis, 2004

PROFESSIONAL INDUSTRIAL EXPERIENCE:

Engineering Specialist – Aerojet Rocketdyne
Aug. 2012-present

MTS IV – Pratt and Whitney Rocketdyne
Aug. 2005-2012

MTS III - Boeing North America (Rocketdyne Division)
1996-2005

- . Design of telemetry communication system simulators and analysis of communication link budgets.
- . Electronic support and testing of valve actuators for rocket engines.
- . Design of pulse generators, switches, oscillators, analog amplifiers, and temperature sensors.
- . Development of several Acceptance Test Procedures and Design Review Packages.

Engineer for Litton Data Systems (Moorpark Division)
1994-1996

- . Developed test software and batch files to verify successful operation of CPU and System Flex circuit cards.
- . Developed and released several Acceptance and Qualification test plans and procedures.
- . Performed analysis on CPU clock stability and accuracy defined within the specified operating temperature range.
- . Assisted in hardware and software manuals for military computer units.
- . Continuously selected by supervisors and technicians to assist in troubleshooting major problems.

Electrical Engineer for Litton Data Systems (Agoura Hills Division)

1993-1994 through Honors Co-op program.

- . Responsible for editing and creating test procedures which deal with military computers and modules.
- . Tasked with analyzing the performance of error tracking based on inspection data.

PROFESSIONAL TEACHING EXPERIENCE:

Instructor at California State University Northridge, Summer Semester 2018

- . Electronics Design (ECE 340)

Instructor at California State University Northridge, Spring Semester 2018

- . Electronics Design Lab (ECE 340L) Laboratory

Instructor at California State University Northridge, Fall Semester 2017

- . Electronics Design Lab (ECE 340L) Laboratory

Instructor at Pierce College, Fall Semester 2013

- . Electronic Fundamentals (EL 6A)

Instructor at Pierce College, Spring Semester 2013

- . Electronic Fundamentals (EL 6A)

Instructor at Pierce College, Spring Semester 2012

- . Electronic Fundamentals (EL 6B) Laboratory

Instructor at California State University Northridge, Spring Semester 2012

- . Electrical Engineering Fundamentals (ECE 240L) Laboratory

Instructor at California State University Northridge, Fall Semester 2012

- . Fiber Optic Communications (ECE 666)

Instructor at California State University Northridge, Fall Semester 2011

- . Fiber Optic Communications (ECE 666)

- . Fiber Optic Communications (ECE 666L) Laboratory

Instructor at Pierce College, Fall Semester 2011

- . Electronic Fundamentals (EL 6B) Laboratory

Instructor at California State University Northridge, Summer Semester 2010

- . Theory of Digital Systems (ECE 320L) Laboratory

Instructor at California State University Northridge, Spring Semester 2007

- . Probabilistic Systems in Electrical Engineering (ECE450)

Instructor at California State University Northridge, Fall Semester 2006

- . Electrical Engineering Fundamentals (ECE 240L) Laboratory

Instructor at California State University Northridge, Spring Semester 2006

- . Digital Electronics (ECE 442L) Laboratory

- . Electronics II (ECE440L) Laboratory

Instructor at California State University Northridge, Fall Semester 2005

- . Digital Electronics (ECE 442L) Laboratory

- . Electronics II (ECE440L) Laboratory

Instructor at California State University Northridge, Spring Semester 2005

- . Electronics II (ECE440L) Laboratory

Instructor at California State University Northridge, Spring Semester 2003

- . Linear Systems II (ECE 351)
- . Probability (ECE450)

Instructor at California State University Northridge, Fall Semester 2002

- . Probabilistic Systems in Electrical Engineering (ECE450)

Instructor at California State University Northridge, Spring Semester 2002

- . Electronics I (ECE 340)

Instructor at DeVry Institute of Technology, Summer Semester 2000

- . Digital Circuits (EET 220) and Digital Circuits laboratory (EET 220L): Class and lab focused on the design of latches, flip-flops, 555 timers, shift registers, counters, and Analog-to-Digital and Digital-to-Analog converters.

Laboratory instructor at California State University Northridge, Fall Semester 1999

- . Electronics I (ECE340L) laboratory
- . Electromagnetic Fields and Waves I laboratory (ECE370L) Teaching Assistant

HONORS:

- . IEEE Teacher Appreciation Award, 2003
- . Hughes Solid State Microwave Laboratory Scholarship, 1993/1994
- . TECOM Scholarship, 1992
- . 10th Annual Honors Convocation Medal, 1994
- . Member of Tau Beta Pi

PUBLICATIONS:

- . Space Shuttle Main Engine Technical Manual, July 2011
- . Space Shuttle Main Engine Lightning Retest Criteria, January 2010
- . Circuit Element Design Report for Speed Sensor Signal Conditioner on J-2X program, June 2009
- . SSME Controller Terminal Post Solder Life Limit, April 2007
- . With Golomb, S., There Are No Further Counterexamples to S. Piccard's Theorem, IEEE Transactions on Information Theory, 2007
- . Test Report Specialty Manual, Pratt&Whitney Rocketdyne, September 2005
- . On the Nonexistence of Counterexamples to Sophie Piccard's Theorem, Ph.D. Thesis, December 2004
- . Valve Driver Assembly Environmental Qualification Test Report, Boeing North America, April 2002
- . Lithium Thermal Battery Test Procedure, Boeing North America, June 2000
- . DICE Pre-installation test procedure, Boeing North America, February 2000
- . Operator Manual for Ordnance/Valve Simulator, Boeing North America, May 1999
- . Acceptance Test Procedure for KWRF Simulator, Boeing North America, February 1999
- . Kinetic Weapon Radio Frequency Simulator Requirements, Boeing North America, June 1998
- . Handheld Terminal Data Unit Acceptance Test, Litton Data Systems, February 1996
- . Analysis and Simulation of Phase-Locked Loops - Masters Thesis CSUN Press, 1996
- . Principles and Implementation of a Photovoltaic System, June 1995
- . Laptop Data Terminal Qualification Test Plan (U.S. Army), Litton Data Systems, October 1995