

# RABAH MEZENNER

Phone: (972) 238-6210  
rym8401@dcccd.edu

12800 Abrams Road, A110  
Dallas, TX 75243

## EDUCATION

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- Project Management Professional** March 2010
- PhD** Arizona State University, **Electrical Engineering** December 1988  
Dissertation: "Conductivity Fluctuations in Small Structures: Simulation of Quantum Electron Transport in Quasi-2d Structures". Advisor: Dr. D. K. Ferry
- MS** University of Texas at Austin, **Electrical Engineering** December 1984  
Thesis: "Encapsulation of Ion Implanted GaAs and InP".  
Advisor: Dr. Ben G. Streetman
- BS/DES** University of Science & Technology HB, **Physics-Solid State** May 1981  
Minor in Electrical Engineering

## ACADEMIC EXPERIENCE

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- University of Texas at Dallas**, Dallas, Texas September 2012-Present  
**Senior Lecturer II**, Eric Jonsson School of Engineering and Computer Science
- Richland College**, Dallas, Texas January 2009-Present  
**Adjunct Faculty**, College of Engineering and Technology

## COURSES TAUGHT

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- At **University of Texas at Dallas**
- **ECS 3361: Social issues and Ethics in Computer Science and Engineering**
- At **Richland College**
- **CETT 1429: Introduction to Solid State Devices and Circuits**
  - **ENGR 2306: Introduction to Digital Systems**
  - **ENGR 2106: Introduction to Digital Systems Lab**
  - **ENGR 2105: Electrical Circuits 1 Lab**
  - **ENGR 2300: Applied Linear Algebra**
  - **ENGR 2305: Electric Circuits I**
  - **ENGR 1201: Introduction to Engineering**

## **PUBLICATIONS AND PRESENTATIONS**

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1. Advancement in Robust MEMS Development with Wei-Yan Shih, presented at 2008 TI MEMS Symposium.
2. The Journey to a 7.6um Voltage Scaled Pixel with Onboard Reset Driver with Randy Long, presented at 2008 TI MEMS Symposium.
3. The Digital Micro-Mirror Device, A MEMS Winner for Ultra-Violet Light Applications with Stanford Gautier, presented at 2008 TI MEMS Symposium.
4. Digital Projection of UV Light for Direct Imaging Applications with Eric Braddom et al.
5. Optical Metrology for DMD™ Characterization with Seth Miller et al.
6. Magnetoconductance in Lateral Surface Superlattices with D. K. Ferry et al.
7. Magnetoconductance Fluctuations in a two-dimensional stripe with A. M. Kriman et al.
8. Magnetoconductance in a Two-Dimensional Stripe, poster paper
9. On the use of Concus-Golub Transformed Slotboom Variables in Semiconductor Device Simulations with P. Blakey et al.

## **INDUSTRY EXPERIENCE**

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### **Texas Instruments. Inc., Dallas, Texas**

1989-2009

#### **Engineering Manager, DLP™ Products (2004-2009)**

- Cost Center Manager for New Technology Development.

#### **Project/Section Manager, DLP™ Products (1999-2003)**

- Technical Leader responsible for new pixel development and yield improvement of new products.

#### **Product/Process Integration Engineer, (1989-1999)**

- Responsible for process flow and test of new DMD products and Flash EPROMs.

### **Center for Solid State Electronics, Arizona State University**

#### **Research Assistant, (1985-1987)**

- Responsible for Liquid Phase Epitaxy process of GaAs/AlGaAs Heterojunction lasers (Motorola project)

**Microelectronics Lab, University of Texas at Austin**

**Research Assistant, (1982-1985)**

- Responsible for Chemical Vapor Deposition system for Silicon Dioxide and Silicon Nitride films

**PATENTS**

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<u>Patent No.</u>	<u>Issued</u>	<u>TITLE</u>
8,791,012	07/29/2014	Methods and apparatus for manufacturing semiconductor devices
7,820,063	10/26/2010	Micromirror Device and a Method of Making the Same
7,419,609	9/2/2008	An Electrical Method To Quantify Over Etch Of Metallic Or Semiconducting Layers, Pads And Contacts During Etch Processes
7,262,900	8/28/2007	Utilizing A Protective Plug To Maintain The Integrity Of The FTP Shrink Hinge
7,199,917	4/3/2007	Micro-mirror Element With Double Binge
7,252,395	8/7/2007	MEMS Device Deflection Stop
7,072,094	7/4/2006	Via Adhesion In Multilayer MEMS Structure
7,011,415	3/14/2006	Yokeless Hidden Hinge Digital Micro-mirror Device
5,768,007	6/16/1998	Phase Matched Reset For Digital Micro-mirror Device
5,706,123	1/6/1998	Switched Control Signals For Digital Micro-mirror Device With Split Reset
xx	Pending	A Process Method And Structure To Enable Low Voltage And Modulate Damping Of A MEMS Pixel
xx	MIA	Method For Improving The Use Of TIN Visible Spectrum Anti-Reflective Coatings Via Substrate Temperature Control
xx	Disclosed	MEMS Metal System Anneal / Stabilization Before Sacrificial Layer Removal
5,596,528	1/27/1997	Method of Using Source Bias to Raise Threshold Voltages And/Or To Compact Threshold Voltages
5,428,578	6/27/1995	Biasing Circuit and Method to Achieve Compaction And Self-limiting Erase In Flash EEPROMs.

**PROFESSIONAL TRAINING**

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**Project Management Professional**

**Workshop on Cooperative Learning, Diversity and Student Engagement**

Richland College. 2009-Present.

**Compliance Training modules at Richland College**  
**Compliance Training modules at UTD**  
**Workshops on Teaching Excellence at UTD**

**Workshop on achieving student success in Engineering**

**Prepared application for NCEES workshop on overcoming challenges in ethics education.**

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**PROFESSIONAL SERVICE AND AFFILIATIONS**

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**Supported ABET evaluation of UTD BMEN Program**  
**Hiring and supervision of student graders for social issues and ethics in engineering.**  
**Course coordinator for ECS 3361 at UTD**  
**Mentored at SMU Science and Technology Programs.**  
**Science Fair Judge at PISD Science Fairs.**

**Served as Member DLP™ Patent Committee and Technical Council**  
**Served as Member of Change Control Board in DLP™ Products**  
**Senior Member of Technical Staff at Texas Instrument.**  
**Senior Member of IEEE and Member of Project Management Institute.**

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**HONORS AND AWARDS**

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**“Innovators In Action” Award at Texas Instruments** 2004

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**LANGUAGES**

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**Proficient in English, French, Arabic and some Spanish.**