

EXPERT MATH & SCIENCE INSTRUCTOR, PHONE: (760) 421-3958**SUMMARY**

Expert in teaching Math and Science classes for past seven years. At present coaching High and Middle School students at **Mathnasium**. Experience in teaching EET classes at **University of Pittsburgh**, Johnstown PA. Listed in **Cambridge Who's Who** Directory 2008-09 & **Wyzant, Inc.** Certified Tutor.

ACCOMPLISHMENTS

- Authored four papers in International test conference, TI technical Journal and Electronics magazines.
- Awarded five patents in computer circuits, and published 12 technical reports at Texas Instruments, Inc.
- Products: Nxt2000, Nxt2002, Nxt6000, Nxt2005, Smart ID, E-menu, Falcon III Manpack and HSDRs.

BOOKS AUTHORED

- Text Book: **Unique Physics of Light and Astronomy**, Published August, 2016 in CA
- Reference Books: **True Physics of Light, Beyond Relativity**, 1st and 2nd Edition, Published 2010 & 2011.

TECHNICAL SKILLS

- **Programming:** C, C++, AWK, JAVA, PERL, **Modelsim 10.0c** VERILOG & MATLAB
- **Documenting:** MS Office Suite, GVIM, EMACS, SLIKEDIT, You Tube, and VISIO
- **FPGA:** Xilinx **ICE 8.2, Logic Friday 1.1.3** and ALTERA Design Compiler.
- **Academic tools** Course Web & Blackboard Academic Suite 9.1 and CodeWarrior IDE 5.9.

SOCIAL MEDIA: RNC COMMITTEE MEMBER, Boundless Project, Facebook, Tweet and LinkedIn MEMBER: Planetary Society PAST MEMBER: IEEE, AAPT & RPCN. Email: Shailesh.mwp@gmail.com

You Tube

1. <https://www.youtube.com/watch?v=kX5V3-j5f9w> Expert math tutor, Escondido, CA...
2. <https://www.youtube.com/watch?v=mPazgTIuwPU> Skylativity®: Remedy for Gaps...
3. <https://youtu.be/nhgbM4Gg568> Expert physics tutor, Escondido, CA (San Diego area)...

COMPENSATION: \$25/hr

LOCATION: 2530 Bear Valley Pkwy, Unit 210 Escondido CA 92027-3599

RECENT EXPERIENCE: Educator

EDUCATION: B.E.(INDIA), M.S.(USA) **Web:** <https://www.Skylativity.com>

Mathnasium, South Escondido, Escondido CA— Math Instructor

06/2016-Present

- Coaching 90 students from Middle thru High School in Algebra & Geometry, the Mathnasium Way.
- One on one tutoring: Trigonometry (sophomore), Algebra classes, Pre-Calculus, Physics and SAT test takers.

Mathnasium, San Marcos & Carlsbad, CA— Math Instructor

09/2013-05/2016

- Coached 50 students from Middle thru High School in Algebra & Trigonometry, the Mathnasium Way.
- Graded students tests in Trimathlon, a nationwide contest to judge their score and results.
- Administered tutoring session on LTE PHY Downlink Model in Simulink to **Jim Oates** from Qualcomm.
- Administered one on one tutoring session in Calculus to **Randy Mendiola**, a Palomar College student.

University of Pittsburgh, Johnstown, PA—Visiting Instructor

08/2011-08/2012

- Taught classes Digital Electronics, Circuits Theory and Programming in **MATLAB 7.12**.
- Administered labs for classes Electric Circuits, Digital Electronics, Embedded Systems & Control Methods
- Advisor for Senior Projects, Speed Check Box, Robotics Lawn Mower & Wellness Center Tracking System.
- **Judge for speech contest:** Topics, High Speed Rail Roads & Green Energy, Solar Cells and Wind Turbines.
- Presented Seminars “**Semiconductor Circuits: Design for Manufacturing**” and “**True Physics of Light**”

Matrix Writers & Publishers, LLC Escondido, CA—Professor and CEO

06/2009-Present

- Presented Seminar “**Quantum of Light Unify Forces of Nature**”, Siddhartha College, India, **December 2017**
- Author of a White paper “Unique Concepts of Skylativity®” published **December, 2015**
- Presented Seminar “**Quantum of Light and Astronomy**”, Ho Chi-Minh City, Vietnam, **September, 2014**
- Reviewed paper “How to Derive Schrödinger Equations” from Harvard/MIT Professors Ward and Volkmer.
- Presented Seminar “**Process: Write & Publish a Book**” in **Global Education Conference, Fall 2013**

My website: <http://www.Skylativity.com>

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Tutor: https://www.wyzant.com/Tutors/Sky_Expert_Math_Tutor

Harris RF Communications, Rochester, NY--Software Engineer Level 3

06/2008-06/2009

Responsible for testing SDRs utilized by US Marine forces stationed in Middle East. Completed 200 tests, every week, validating functionality of Manpack and Handheld Radios. Created 50 trouble reports and identified defects in the operation of the Radios. Fixing the errors resulted into \$20 million dollar savings.

- Developed C program firmware in AnW2 wireless network of SDR to measure and display SNR.
- Wrote a White Paper on Software Quality Metric for SDRs that led to saving of 2 Million Dollars per Year.
- Developed new architecture of Silent mode iPOD Radio and First Responder Service Radio.
- Estimated Logic utilization on FPGA CLX25 using ISE8.2i, updated VHDL code and test benches for SDR.
- Created regression, reliability and scenario test procedure for evaluation of Software release 3.0 & 3.5 on Manpack Falcon III Radios using Firebird 6000 data generator for ANW2, SINCGARS and Satellite communication GPS Waveforms.

ENTROPIC Communications, San Jose, CA--Consulting Engineer

03/2008-04/2008

Discovered errors in VERILOG model of a broad-band network access controller (BBNAC) circuit. This effort saved One million dollars by release of error free design into production.

- Analyzed ATPG test pattern failure on 2 Million gate/65 nm BBNAC Maverick project using stuck at and transition delay fault models.
- Generated ATPG scan patterns with fault grade in access of 98% coverage.

GeneSys Testware, Fremont, CA--Director of Applications Engineering

07/2007-02/2008

- Trained clients in BIST tools ArraytestMaker™, HieretestMaker™, DFT/BSDA Architect & Fast Scan.
- Analyzed memory faults for address faults, stuck-at faults, transition/coupling faults and dynamic faults using fault grade Fast Scan tool from Mentor Graphics.
- Applied Mentor Graphics Fast Scan ATPG test flow for Nexsi & C-cube design

MicroLink, Inc., Fullerton, CA--Chief Executive Officer

06/2002-07/2007

MicroLink, Inc. was started in partnership. Did market research and identified needs of SMART cards as one of the product of the new start-up. Put together a business plan and outlined strategies to deploy SMART cards for healthcare and student ID applications. Patented intellectual property associated with products for protection.

- Completed business plan/cost estimation & market forecast revenue \$100 million.
- Generated initial funding requirements & revenue data for operation of the startup.
- Documented trademarks & intellectual properties for Smart card/E-menu products.
- Created program description/algorithm to store & retrieve data from Smart ID with ISO 7816.
- Submitted proposal for government grant SBIR Project All Terrain Combat Identification System for Army.

Broadcom (NxtWave Comm.), Langhorne, PA--Project Lead IC Test Engineer

02/1999-02/2002

- Completed static timing analysis of critical paths in Nxt2000 circuits for HDTV application using Primetime from Synopsys and developed Perl scripts to perform the analysis.
- Finished design of Memory BIST Logic on Nxt6000 OFDM chip, which supports HDTV reception in Europe, Nxt2002 and Nxt2005 that supports HDTV reception in US.
- Designed scan access mechanism for all the 8 chains of the cable modem circuit. Implemented JTAG interface and logic for enabling serial scan, parallel scan and boundary scan.
- Submitted paper to IEEE test conference 2002 in Washington D.C. for ATPG using TetraMax
- Managed design for test (DFT) logic efforts and Generated ATPG Scan patterns with Fault coverage above 99% on VSB/QAM receiver chips Nxt2002, Nxt2005 and Nxt6000.

REFERENCES & TUTOR WEBSITE: <https://escondido.universitytutor.com/tutors/573696>

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|----------------------|---|---------------------|
| a) William Wieserman | Email: wiesermw@ctc.com | Phone: 814-269-2718 |
| b) Larry Hernandez | Email: lhernandez@miracosta.edu | Phone: 760-757-2121 |
| c) Lisa Gunther | Email: lisadigital@gmail.com | Phone: 760-390-4556 |
| d) Lucille Capule | Email: Southescondido@mathnasium.com | Phone: 858-335-4737 |
| e) Ron Capule | Email: Roncapule@gmail.com | Phone: 517-505-5515 |

My website: <http://www.Skylativity.com>

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Tutor: https://www.wyzant.com/Tutors/Sky_Expert_Math_Tutor