IANA LIN

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EDUCATION

- **B.S. in Electrical Engineering & Computer Science, University of California, Berkeley; December 2026**
  - Discrete Mathematics and Probability Theory
  - Foundations of Signals, Dynamical Systems, and Information Processing
  - Great Ideas in Computer Architecture
  - Circuits and Devices
  - Introduction to Machine Learning
  - Optimization Methods in Engineering
- **A.S. in Mathematics; Computer Science; Physics, Fullerton College; May 2024**

RESEARCH

- **Research Experience for Undergraduates (REU), University of Utah; May 2024 - August 2024**
  - Create formal models matrix accelerator arithmetic using the **Z3 Theorem Prover** for Satisfiability Modulo Theories solving
  - Automate floating-point arithmetic-feature tests to compare vendor designs
  - Test bounds of floating-point arithmetic axioms and properties (e.g. non-monotonicity, non-standard rounding schemes)
- **Computational Biology Research, University of California, Irvine; February 2024 - June 2024**
  - Train and fine-tune cell segmentation models using large spatial transcriptomics data sets (30 Gb+)
  - Develop novel quality control methods: modeling cell contamination (w/ and w/o corresponding single-cell sequencing data) using Seurat (artificial nearest neighbor detection, negative marker purity, co-expression network analysis) in R
- **Computational Genomics Research, University of California, Irvine; July 2023 - April 2024**
  - Generate heat maps and principal component analysis plots with R and Python for 30 PHLDA2 gene loci
  - Write bash script and execute SLURM commands to request resources on server
  - Report findings for data processing pipeline in JupyterLabs and present in weekly lab meetings

PROJECTS

- **SIEEECURE - Sequestered Encryption Scheme for ALU**
  - Model encryption of incoming data for secure enclave in **C**
  - Encode secure ALU operations using **Verilog**
- **RISC-V Hackathon**
  - Optimize softmax function to use RISC-V vector intrinsics and algorithmic approximation
  - Improve accuracy from 60% to 85%
- **RISC-V CPU**
  - Hard-wir control logic for standard RISC-V 32-bit instructions with pipelined datapath using **Logism**
  - Integration test pipelined datapath in RISC-V
- **Teacher Scheduler Mobile App, 2021 MIT App Inventor Appathon for Good; August 2020 - September 2020**
  - Coded graphical user interface app for teachers to manage their teaching schedule using Java

EXPERIENCE

- **International Conference for High Performance Computing, Networking, Storage, and Analysis 2024**
  - Poster accepted for Student Research Competition
  - Sponsored by Association for Computing Machinery and IEEE Computer Society Technical Community on High Performance Computing
- **Embedded Physics I Tutor, Fullerton College; August 2023 - May 2024**
  - Host weekly after-class tutoring sessions for students to go over problem sets, exams, etc.
  - Tutor and assist in-class lectures
- **Robyn Open-Source Contribution, CodeDay Labs; June 2023 - August 2023**
  - Improve backend mime-type handling of multi-threaded, asynchronous Python/Rust Web Server
  - Document and commit changes using Git and demonstrate work through cumulative presentation
  - Communicate with mentor for weekly one-on-one meetings and general advice
- **Non-Profit Bakery Owner, Aan Bakery — Jan 2020 – Apr 2021**
  - Manage supply, finance, non-profit practices
  - Donate $20k+ to Social Justice League
  - Bake, pack, ship goods
- **Social Media Entrepreneur — Aug 2016 – May 2020**
  - Amassed 200k+ followers over 3 years

- ○ Capitalize business Instagram by leveraging metrics
- ○ Manage business, product design, and media production in Etsy
- **Competitive Figure Skater, USFSA — Feb 2009 – Jan 2020**
  - ○ 2019 USFSA Open Juvenile Regional Champion
  - ○ 2018 USFSA Pre-Juvenile Regional Champion
  - ○ 2016 USFSA US Synchronized Nationals Medalist
  - ○ 2015 USFSA Pacific Synchronized Sectionals Medalist

TECHNICAL SKILLS

- **Z3 Prover, Python, Git, C++, R, JupyterLabs, Java,**

VOLUNTEER

- **Tiny Tapeout - Stanford University; Nov 2024 - Nov 2024**
  - ○ Assist fifty students in designing MOSFET transistor and digital logic design during a 4-hour tapeout workshop
- **Behavioral Therapist Intern, North Orange County Student Education Local Plan Area; June 2021 - July 2021**
  - ○ Individually aided elementary-aged children with severe learning disabilities during instruction
  - ○ Presented district-wide presentation on the effects of autism and other learning disabilities on instruction
- **Community Volunteer, Second Harvest Food Bank of Orange County; May 2020 - Jul 2021**
  - ○ Package resource boxes for delivery

AWARDS/HONORS

- **President's Honor List, Fullerton College; 2023, 2024**
- **Valedictorian — Troy High School; 2022**
- **AP Scholar with Distinction, College Board; 2020, 2021, 2022**