

# Hailin Wang

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## Experience

### Applications Engineer | Elevate Semiconductor

*San Diego, California | June 2023 - Present*

- Serve as primary technical liaison for integration of SoCs into customers' Automated Test Equipment (ATE) to achieve optimized performance for PPA (Power, Performance, Area)
- Resolved stalled negotiations by leveraging technical data from bench performance and silicon validation to develop an engineering solution to meet product specs, which helped secure an additional **\$10M+ in semiconductor IP design wins**
- Led the resolution of customer technical issues by facilitating collaboration with cross-functional teams (design, sales operations, and quality), utilizing **Cadence** for transistor-level debug and simulation, Python scripting for test development, and JMP for data visualization cutting average root cause analysis from 8+ months to under 5 weeks
- Created a company-wide **CRM platform connecting Zendesk and JIRA**, and automated workflows to track SLA metrics resulting in 70% YoY open ticket volume decrease and 30% reduction in total resolution time
- Performed bench testing and validation of circuits using electrical test equipment and lab instrumentation such as oscilloscopes, multimeters, and logic analyzers fully automating 50+ specs saving 100 hours of work hours
- Redesigned the customer return process (RMA) for electrical failures, streamlining the process from initial test screen to advanced imaging (photo-emission, IR imaging, FIB) which addressed 50% of previously unsolvable root causes.

### Data Warehouse Consultant | Fidelity Investments

*Toronto, Canada | October 2022 – April 2023*

- Productionized ML models using AWS S3, EC2 and batch jobs to transform financial advisor performance tracking from a quarterly process to daily insights, enabling faster and more informed decision-making
- Researched 20+ academic papers to create a ML model to predict customer churn and model marketing uplift
- Conducted EDA on Datawarehouse using Snowflake Snowpark and SQL to build client retention strategy

### IC Hardware Engineer | AnalogX - Rambus

*Toronto, Canada | May 2021 – October 2022*

- Designed SERDES integrated circuit using Verilog – completing 100% of RTL hardware meeting tape out deadline
- Managed integration of semiconductor IP across 15+ engineer digital design and verification teams
- Led digital integration and verification dev in Linux reaching **99%** code coverage within cost and schedule constraints
- Programmed Verilog scripts and registers to verify digital circuits and validated using **Cadence** design simulation tools
- Introduced hardware optimization feature reducing bit error rate by **9 orders** of magnitude using FEC encoding

### Software Developer | Rocscience Inc

*Toronto, Canada | May – August 2020*

- Drove leading project development for (EX3, RS3, Slide3) scaling the annotation toolset features by 3x
- Implemented UX/UI features using C# and .NET for product updates to **450+ Universities in 120+ countries**
- Refactored library of 200+ files using Visual Studio and git leading to reduced model processing runtime by **30%**

## Skills

Electrical and hardware engineering: **Cadence Virtuoso**, Cadence Xcelium, Verilog, ARM assembly, Synopsys VCS

Data Analysis and programming: **JMP, C#, C++, Python, MATLAB**, AutoCAD, HTML/CSS, javascript

Prototyping: 3D printing, Pneumatics assembly, CNC Machining, electronics systems, Engineering Design Process (8D, FMEA)

Languages: English, native | Chinese, fluent | French, proficient

## Education

### University of Toronto

Bachelor of Applied Science in Engineering Science | Graduation: April 2023

- Major: Robotics Engineering. Minor Business and Finance
- Cumulative GPA: 3.68 | Dean's Honour Roll | President's Scholar of Excellence
- Clubs: You're Next Career Network, Engineering Sports Association, IEEE Toronto Branch
- Relevant Coursework: Computer Algorithms and Data Structures, Operating Systems, Digital and Computer Systems