

# Aaron Fine

www.AaronTFine.com

I am an accomplished electro-mechanical designer with experience on successful projects ranging from implantable medical devices to high volume cable assemblies to high dollar capital equipment.

I have worked for component suppliers, medical device manufacturers, government contractors, and OEMs. I bring over 10 years of practical design and manufacturing experience to all of the teams that I work with. I have a record of successfully implementing new designs and process improvements while ensuring compliance with ISO, FDA, and internal business requirements.

I am known for my good attitude and my ability to get the job done. In short, I solve problems.

## Previous Employment

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### Space Dynamics Lab

*Software Engineering Assistant*

**North Logan UT**

*May 2017–Present*

- Created Software Evaluations
  - Evaluations were performed on both Open Source and proprietary software programs ranging from automatic data translation tools to the Apache suite of projects.
  - Evaluations consisted of researching the program, digesting the documentation and installation onto a virtual machine (usually Linux based). After a successful install, tests were developed and run to explore functionality, performance, logging, and auditability, as appropriate.
  - Each program was then assessed against over 30 criteria ranging from questions about the development process to future roadmaps and upgradability. The findings were then compiled into a report along with a summary of what the program was and how its major pieces worked together.
- Worked on Software Development for an internally developed software cataloging system used by a few thousand people worldwide.
  - Performed regression testing and created bug report tickets as appropriate.
  - Wrote documentation for both internal use regarding the development process and detailed usage instructions for the customer.
  - Provided responses to customers when they submitted feedback.
  - Closed open bugs through troubleshooting, debugging, and fixing code, usually JavaScript and Java.
  - Added functionality under the direction of more senior developers.

### Utah State University

*Computer Science Lab Section Leader*

**Logan UT**

*September 2016–December 2017*

- Taught C++ to multiple classes of students through the creation of supplemental lectures and directed lab exercises.
- Reviewed, debugged, and graded C++ assignments from students.

### KLA-Tencor

*New Product Introduction Engineer*

**Milpitas CA**

*July 2012–December 2015*

- Managed a complex Bill of Material (BOM) structure (up to 12 level deep nested structure consisting of 10-30K unique parts, depending on the product) for multiple wafer inspection tools (est 2 to 10 per month at ~\$15 mil each) using Excel for tracking and reporting, Visio for visualization, and Enovia for data management.
- Created a waterfall type schedule for the Common Platform group consisting of up to 15 different engineers, contractors, and off-site employees using MS Project which was used for coordination within the group, coordination with other groups in the department, resource planning, and for reports to upper management.
- Tracked, reviewed, and managed hundreds of Engineering Change Orders (ECO) from dozens of engineers per program for multiple generations of products using Excel and Enovia.
- Worked closely with offshore manufacturing in Singapore and offshore design in India.

### Valley Engineering Group

*Electro-Mechanical Engineer*

**Livermore CA**

*June 2011–July 2012*

- o Created, reviewed, and updated wiring diagrams, interconnect drawings and schematics for the National Ignition Facility (NIF) using ProE and AutoCAD.
- o Led 3 person group of Mechanical Designers as team leader and customer interface where we designed enclosures, optical micro-positioners, cable assemblies, and other opto-electro-mechanical assemblies.
- o Worked with various Product Lifecycle Management (PLM) systems including Enovia.

**Medconx**

*Associate Mechanical Engineer*

**Santa Clara CA**  
*June 2002–July 2011*

- o Worked with customers to design custom connectors and cable assemblies for the medical device market using SolidWorks, AutoCAD and Protel.
- o Designed injection molded parts, schematics, BOM's, Printed Circuit Board Assemblies (PCBA's), technical specifications, and other electromechanical devices.
- o Set up manufacturing lines for high volume production (est 20k per month each for 2 main product lines) as well as low volume, high mix production (est 10 to 500 per month for a dozen different products) of custom connector and cable assemblies.
- o Performed incoming quality control, inventory management, setup and programming of optical comparators, and various other manufacturing engineering duties for 5k-30k/week of a dozen different components and assemblies.

**Adapters Plus**

*Mechanical Drafter*

**Tracey CA**  
*April 2002–June 2002*

- o Created fabrication prints for custom BGA adapters using AutoCAD. Worked closely with vendors for increased manufacturability of new products. Trained employees in the use of AutoCAD and drafting best practices.

**Emulation Technology**

*Mechanical Drafter*

**Santa Clara CA**  
*August 2000–September 2001*

- o Drafted pin-maps for custom adapter boards and customer drawings for catalog parts using AutoCAD. Updated archived drawings to conform to new company standards in AutoCAD. Trained new employees in the use of AutoCAD.

**Education**

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**Utah State Univerity**

*BS Computer Science*

**Logan, UT**  
*2019 (est)*

**Mission College**

*AS Electro-Mechanical Drafting*

**Santa Clara, CA**  
*2011*

**Mission College**

*AS Liberal Arts, Science and Technology*

**Santa Clara, CA**  
*2010*

**Technical and Personal skills**

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- o **Programming Languages:** Proficient in: C++, Python, Java, JavaScript, L<sup>A</sup>T<sub>E</sub>X

AutoCAD – 10 years	Connector Design – 7 years
DFM – 6 years	Schematics – 10 years
Tooling Design – 6 years	Injection Molding Design – 6 years
ISO 13485 – 4 years	Enovia – 4 years
Technia – 2 years	ISO 9001:2003 – 7 years
Microsoft Office – 10 years	PCB Design – 9 years
Project Management – 4 years	SolidWorks – 8 years
Technical Writing – 7 years	Test Fixture Design – 6 years

- o **Other:** Experience with soldering through hole and surface mount components, CNC inspection equipment, hand measuring tools, and good practices for manufacturing