

---

## Latent Damage and Reliability in Semiconductor Devices

**Advisor:** Dr. Randall Geiger

**Client:** Dr. Randall Geiger, EcpE

**Members (roles):**

Sean Santella (Leader)

Jaehyuk Han (Webmaster)

Hayle Olson (Communication Leader)

David Ackerman (Key Concept Holder)

---

**Weekly Summary:**

We held two team meetings and an advisor meeting this week. During the advisor meeting it was brought to our attention that our high voltage source was not operating as we had originally thought. We also wrote our final report.

**Meeting Notes:**

Team Meeting (April 18<sup>th</sup> at 2PM in Coover 3014)

*Duration:* 1 Hour

*Members Present:* Jaehyuk Han, David Ackerman

*Notes:* During this team meeting Jaehyuk and David worked with the ESD stress board to try and troubleshoot the existing issues.

Advisor Meeting (April 20<sup>th</sup> at 1PM in Coover 2046)

*Duration:* 30 Minutes

*Members Present:* Dr. Geiger, Sean Santella, Jaehyuk Han, Hayle Olson, David Ackerman

*Notes:* During this advisor meeting Dr. Geiger assisted us with troubleshooting our electric fencer. It was during this meeting that we discovered our electric fence was not operating as we thought it was. Because of this Dr. Geiger provided us with a different one to use until the end of the semester.

Team Meeting (April 20<sup>th</sup> at 1:30PM in Coover 3014)

*Duration:* 1 Hour 30 Minutes

*Members Present:* Sean Santella, Jaehyuk Han, Hayle Olson, David Ackerman

*Notes:* During this team meeting we worked to stress a device with the new electric fencer that Dr. Geiger provided us. We also implemented 2 2watt resistors and 2 4kV diodes to use when stressing our device.

### **Weekly Accomplishments:**

- Wrote our Final Report.
- Recognized incorrect electric fencer.

### **Plans for Next Week:**

- Find a stressing condition that will destroy 50% of our devices.
- Practice Final Presentation.

### **Pending Issues:**

- None

### **Individual Contributions:**

Sean Santella: Attended a team meeting, an advisor meeting, and worked on final report.

Jaehyuk Han: Attended both team meetings, an advisor meeting, and tinkered with the ESD stress condition.

Hayle Olson: Attended a team meeting, an advisor meeting, wrote weekly report, and worked on final report.

David Ackerman: Attended both team meetings, an advisor meeting, tinkered with the ESD stress condition, and worked on final report.

### **Hourly Contributions:**

<u>Member:</u>	<u>Weekly Hours:</u>	<u>Semester Hours:</u>	<u>Yearly Hours:</u>
Sean Santella	5.0	52.5	105.5
Jaehyuk Han	3.5	30.5	67.0
Hayle Olson	4.5	46.5	93.0
David Ackerman	9.5	48.5	90.5

**Semester Total: 178.0 Hours**

**Yearly Total: 356.0 Hours**