

PSU ECE Capstone Team 04 Contract

Contact Information

Team Members

Team Member Name	Phone	Email
Henry Sanders*	(831)430-6299	hensan@pdx.edu ; henry.sanders@pgn.com
Chris Kane-Pardy*	(707)708-1761	chrisk@pdx.edu ; chris.kane-pardy@pge.com
Wallace McKenzie	(503) 816-2963	mwallace@pdx.edu ; wallace.w.mckenzie@intel.com
Kamal Smith	(971)706-3078	kamal@pdx.edu

Industry sponsor

Organization and Name	Phone	Email
COATL - Josh Mendez		joshmen@pdx.edu

Faculty Advisor

Name	Phone	Email
Dr. Mark Martin		marmart2@pdx.edu

Project Objective

We would like to complete the project as defined by our industry sponsor, fully meet the rubric requirements as defined by our faculty advisor, have fun, and ideally end up with a patent at the end of it.

Member Skills, Strengths, and Areas of Practice

Teammate Name	Key areas of strength to leverage in the project	Key areas of practice and development in the project
Henry Sanders	<ul style="list-style-type: none"> -LTSpice, KiCAD, Altium -Python, C, Assembly -Leadership -Organization/Documentation/making things pretty -Technical Communication/Writing -Soldering -PCB/Circuit Design -Software/Hardware Debugging -Oscope/DMM/VNA, etc. -Power Systems 	<ul style="list-style-type: none"> -Machine learning -3D Modeling/Printing
Chris Kane-Pardy	<ul style="list-style-type: none"> -Measurement & Test Equipment Operation (Oscilloscope, DMM, VNA, etc.) -Hardware Debugging -Software/Code Debugging -Hardware Architecture Design -Python, C, Assembly Language -Emag/RF Design -Microelectronic Circuit Design -Leadership -Memory Architecture/Hierarchy & Optimization -Soldering -PCB/Circuit Design -Microcontrollers -3D Modeling -RISC-V -Organization/Documentation/making things pretty 	<ul style="list-style-type: none"> -Machine Learning
Wallace McKenzie	<ul style="list-style-type: none"> -C,C++,Python,Assembly,drivers, MATLAB -Soldering -Oscope,DMM,VM,Current Meter -LTSpice -Embedded Systems, Microcontrollers, ESP-IDF -Leadership, project tracking, project management -Documentation, White Papers, Package development (for systems, specification, and training) -Training Coordination -Mentorship -Hardware emulation (Learned in ECE 485/486) -Software and Code troubleshooting 	<ul style="list-style-type: none"> -Machine Learning -3D Modeling/Printing -PCB Design

	and debugging -Memory (technology, optimization, and developed hierarchy) -Microprocessor design and development (both emulation and process development) -Applied Optics (lasers and electron microscopes)	
Kamal Smith	-Code Debugging -Hardware design -C -PCB Circuit Design -Microcontrollers -3D printing	-Machine Learning

Meetings

Meetings					
Team Meetings				Industry Sponsor Meetings	Faculty Advisor Meetings
Meeting Day	Wednesdays	Friday (1/10, 1/17, 2/7)	Fridays (Excluding	Fridays	Fridays
Meeting Times	7:30 PM	4:00 PM-5:00 PM	1:00 PM-5:00 PM	4:00 PM-5:00 PM	1:00 PM-2:00 PM
Platform	Discord	In-Person	In-Person	In-Person	In-Person and/or Zoom
Prep	Henry's Responsibility	Completion of Assigned Work	Completion of Assigned Work	-	-
Expectations	Productive Time Usage	Productive Time Usage	Productive Time Usage	General Check-In, Progress Report, Question Time, etc.	General Check-In, Progress Report, Question Time, etc.
Attendance	Mandatory	Mandatory	Mandatory	Mandatory	Mandatory
Participation	Mandatory	Mandatory	Mandatory	Mandatory	Mandatory
Notes (Minutes)	Use of Henry's Template	Use of Henry's Template	Use of Henry's Template	Use of Henry's Template	Use of Henry's Template

Communications

Preferred Method of Communication

- Discord for general communication and updates between team members and industry sponsor
- Email for faculty advisor

Information Architecture

- GitHub
- Google Drive

Team Working Agreements and Expectations

Guiding principles of how we work together

Division of work should be equal, and progress made should be well communicated.

How we make decisions

Group consensus.

Approach to Conflict

If a conflict arises, whether it is productive or interpersonal, we expect that the person feeling conflicted will communicate their feelings/ideas such that a constructive dialogue can be entered into and the conflict be resolved.

Project Standards

The main objective for this project and team is to 1) Put maximum effort into the overall project quality and design. Quality is not only our #1 goal, it is essential in the final design and functionality of the project. 2) Given that we are working with 60GHz mm waves, showcasing the functionality of how the product design works, along with why and what makes it work, effectively, is key to the success of, and for this team and project. 3) Grade expectations are to achieve academic excellence, and meet our goals and objectives.

How we will hold each other accountable

If for any reason any group member is unable to complete an assigned task by a deadline, the expectation is that the group member will communicate this to the group in advance to the best of their ability. Also, if for any reason a group member is consistently late to meetings, late on deadlines, not communicating, generally slacking, etc., it is the responsibility of all other group members to check in with them, provide constructive feedback, and attempt to help them get back on track. If issues are persistent i.e. continuing after multiple attempts to resolve the issue, it is the responsibility of all other group members to notify the Capstone Coordinator.


How we will give and receive feedback

The expectation for giving feedback to group members is to do so constructively, respectfully, and in a way that empowers them. We intend to heed the advice given in ECE 411 of not attaching our egos to this project - this way, we can cultivate a positive learning environment where all group members feel safe to both give and receive feedback.

Team Contract Signatures

By typing in your name, you agree:

- a) *I participated in formulating the standards, roles, and procedures as stated in this contract.*
- b) *I understand that I am obligated to abide by these terms and conditions.*
- c) *I understand that if I do not abide by these terms and conditions, I will suffer the consequences as stated in this contract.*

Team Member Name
Henry Sanders
Wallace McKenzie
Kamal Smith
 (Chris Kane-Parry)