

Application Exploration of 5G-and-Beyond Wireless Systems and Rural Broadband Team Members:

Vibhu Dhavala
Cristofer Espinoza
Andrew French
Caleb Kitzelman
Samuel Rettig
Jake Roskopf

Required Skill Sets for your Project: (if feasible - tie them to the requirements)

- Software background
 - C Programming Language
- Electronic/Hardware configuration
 - RF Circuitry
 - General Signal Processing
 - Sensor connectivity
- Networking
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Skill Sets Covered by the Team: (for each skill, state which team member/s cover it)

- Software
 - Vibhu, Samuel
- Communication Systems
 - Christopher, Jake, Andrew
- VLSI Circuitry
 - Caleb

Project Management Style Adopted by the Team: (can be a combination)

- Collective management. Action is discussed and decided as a team. Roles will be split up depending on individual talents and skills.
- Individuals will be held responsible for what is assigned to them.

Initial Project Management Roles: (enumerate which team member plays what role)

Due to not having a well-defined project yet and still being in the research phase, we don't quite have distinguished management roles. We are planning to continuously develop the roles as we get closer to a project.

- Scheduling lead
- Meeting lead
- Role assignment
- General decision making
- Communicator

Team Name __sdddec23-12_ARA Project 5G Application__

Team Members:

- 1) _Vibhu Dhavala_____ 2) _Samuel Rettig_____
- 3) _Cristofer Espinoza_____ 4) _Jake Roskopf_____
- 5) _Andrew French_____ 6) _Caleb Kitzelman_____

Team Procedures

1. Day, time, and location (face-to-face or virtual) for regular team meetings:
 - Monday 1:30 PM – 2 PM @ Durham 91 (Bi-weekly, face-to-face)
 - Wednesday 5 PM – 6 PM @ Coover 491 Lab (Weekly, face-to-face)
 - Sunday (as needed, virtually via Discord)
2. Preferred method of communication updates, reminders, issues, and scheduling (e.g., e-mail, phone, app, face-to-face):
 - SMS
 - Discord
3. Decision-making policy (e.g., consensus, majority vote):
 - Consensus between group members
4. Procedures for record keeping (i.e., who will keep meeting minutes, how will minutes be shared/archived):
 - One designated scribe at the start of every meeting
 - Scribe will record meeting notes, key points, objectives for the next meeting
 - Documented on [OneNote](#) (Sp23 – F23 Meetings)

Participation Expectations

1. Expected individual attendance, punctuality, and participation at all team meetings:
 - Team members are expected to attend all general meetings
 - Any absences are accepted so long as communicated prior to the meeting
 - Late or missing members are responsible for inquiring about any missed information
2. Expected level of responsibility for fulfilling team assignments, timelines, and deadlines:

- Team members will be responsible to complete tasks that have been mutually agreed upon at the time of the deadline
 - Communication is expected if a member is unable to complete their task prior to the deadline
3. Expected level of communication with other team members:
 - Team members must communicate attendance and availability when needed
 4. Expected level of commitment to team decisions and tasks:
 - Decisions and tasks will be determined collaboratively
 - No responsibility will be provided to a member unless mutually agreed upon

Leadership

1. Leadership roles for each team member (e.g., team organization, client interaction, individual component design, testing, etc.):
 - Vibhu Dhavala
 - Cristofer Espinoza
 - Andrew French
 - Caleb Kitzelman
 - Samuel Rettig
 - Jake Roskopf
2. Strategies for supporting and guiding the work of all team members:
 - Team will practice positive constructive criticism
 - Team will be respectful of others' ideas
3. Strategies for recognizing the contributions of all team members:
 - Verbal affirmation, contributions and efforts prior to the meeting will be discussed during the meeting

Collaboration and Inclusion

1. Describe the skills, expertise, and unique perspectives each team member brings to the team.
 - Jake- Communication Systems / Analog Design
 - Samuel - Software
 - Vibhu - Software

- Caleb – Analog VLSI Circuitry / RF Circuitry (Light background until next semester)
 - Cristopher – Communication Systems
 - Andrew – Communication Systems
2. Strategies for encouraging and support contributions and ideas from all team members:
 - Discord
 - Weekly meetings
 3. Procedures for identifying and resolving collaboration or inclusion issues (e.g., how will a team member inform the team that the team environment is obstructing their opportunity or ability to contribute?)
 - Direct confrontation discussed between group members
 - Consensus between group members that if a problem is being observed it can be brought up

Goal-Setting, Planning, and Execution

1. Team goals for this semester:
 - To create a good foundation for realization of our project
 - Determine our application of 5G in either the educational aspect or agricultural and rural field
 - Plan and prototype our application.
2. Strategies for planning and assigning individual and team work:
 - Throughout the meetings we will discuss progress and direction
 - Responsibilities will be determined by goals for the next project meeting
3. Strategies for keeping on task:
 - Encouraged to check-in with any interesting research, findings, or progress via SMS or Discord
 - Tasks and responsibilities will be delegated/determined prior to the end of every meeting

Consequences for Not Adhering to Team Contract

1. How will you handle infractions of any of the obligations of this team contract?
 - Infractions will be addressed during the team meetings
 - Resolution will be mutually created to avoid future infractions
 - Ex:

- Adjustment to meeting time
- Relieved of some responsibilities

2. What will your team do if the infractions continue?

- Contact and address the issue to Professor Rachel Shannon

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.*

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|----|--------------------------------|----------------------------|
| 1) | _____ Vibhu Dhavala _____ | DATE _____ 2/19/2023 _____ |
| 2) | _____ Cristofer Espinoza _____ | DATE _____ 2/19/2023 _____ |
| 3) | _____ Andrew French _____ | DATE _____ 2/19/2023 _____ |
| 4) | _____ Caleb Kitzelman _____ | DATE _____ 2/19/2023 _____ |
| 5) | _____ Samuel Rettig _____ | DATE _____ 2/19/2023 _____ |
| 6) | _____ Jake Roskopf _____ | DATE _____ 2/19/2023 _____ |