FORESTREE

Team Dynamics

Alicja M. is our **veteran** in the Junior Academy, having competed in the Flexible Electricity challenge. She also has valuable experience in researching **environmental solutions and sustainability**, conducting field and **lab research**, internships, and writing **academic** papers.

Errita X. is our team leader. She is passionate about **environmental science and studies**, and has conducted in-depth **research** involving **lab experiments** and **connecting with field experts**. She **volunteers** at many local **climate hubs**, dedicated to educating, advocating, and collaborating with her community. In addition to **writing**, she is also an avid **programmer** with background in python and machine learning.

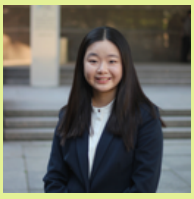
Lily L. has a strong foundation of climate-related facts having competed in the international climate science olympiad. She also has **wet lab** experience as a **research assistant** where she is currently studying esophageal cancer in Kenya. She is also the RUP (Renewable Urban Pioneers) Club leader, which is dedicated to the **UN Sustainable Development Goal** Number 14: Save the Ocean.

Keith D. has done environmental research on ocean **preservation and awareness**, and partook in KidWind Challenge, where he **innovated and designed** wind turbines. He also has experience with school **journalism**, STEM competitions, and **data collecting**. He hopes to carry his research and robotics skills to Junior Academy.

Kirtan P. also shows a strong background in **environmental research**, lab experimenting, and creating projects that involve computer science, machine learning, and **sustainability**. He also has a passion and extensive background in advanced mathematics and **statistical analysis**.

Shantanu P. is a math enthusiast, specifically in statistical analysis, **graphical representation** of data, and the use of probability and **simulation** to explore statistics models. He is keenly interested in the **impact** of geopolitics and history on economic and environmental sustainability.

Overall, our team aims to connect our shared passions for environmental science, studies, and engineering, and research analysis, project building, and statistical analysis. To create a successful project, synchronous and asynchronous communication and collaboration will be our utmost priority. When dividing research and tasks, we will consider each other's strengths and hold each other accountable using task logs. Our cohesive projections of our project, diverse collection of skills, and profound perseverence and curiosity will help us effectively create a well-supported solution for this challenge.


Errita X.


Alicja M.


Hao (Lily) L.


Keith D.


Kirtan P.


Shantanu P.

Team Commitment

Our team will be organizing our deliverables and project research in the shared Google Drive folder—divided into sub-folders for each milestone, and a management folder to store key dates, team member information, and more. Alongside using Launchpad's team space to discuss with our group, we created a group chat on Discord for more effective and accessible communications. By using When2Meet, we've determined that the best time to have meetings is Saturday 8pm EST. In addition to our weekly team meeting, we will be meeting with our mentor weekly on Tuesdays at 10pm EST. All virtual meetings are held through Launchpad's team conference space. Alongside synchronous works, we will also be creating timelines, task logs, and deadlines to keep each other accountable. Through this, we believe that we can reach maximum efficiency and productively create a successful and approachable solution for this challenge.

Expert Advice

Utilizing expert advice will be critical to the success of our project, and we will ensure our engagement with experts through different faucets. **Firstly**, our mentor, **Dr. Bharti Singal**. She is a postdoctoral scholar at UC Davis and a STEM educator. We will be regularly communicating with her on the progress of our project, asking outstanding questions, and meeting her weekly on Tuesdays at 10 pm EST. Dr. Singal's background and emphasis on the interdisciplinarity of science and technology will be critical to our work and provide us a lot of expertise and perspective. She is actively engaged in finding answers to the many challenging problems faced by the world and works hard to inspire the next generation of learners to pursue STEM for the greater good. Further, her extensive experience in mentorship experience within NYAS, viewing academic papers, and revising blueprints. **Secondly**, STEM experts. We will actively connect with field experts, such as agricultural development organizations, urban planners, environmental engineers, climate-smart experts, environmental science professors, and more. Through written and oral interviews, we will gather insights into niche questions on specific aspects of our project. **Thirdly**, we hope to gain public insights into our project and conduct primary research through creating and sharing a survey created on Google Forms.

Finally, we will utilize academic journals in our research for this challenge. Some notable sources include...

- The Forest Carbon collection in Nature Climate Change: presents a collection highly relevant of research papers, review documents, and opinion articles on the theme of forest carbon dynamics and forests' role in climate mitigation.
- The Sustainable Forestry section of Sustainability: includes original research and reviews on the sustainable development of forestry, covering the sustainable use of forests, landscape and urban forests, use of biomass, climate change impacts, adaptation and mitigation in forests, natural resource policy and planning, agroforestry, and a sustainable use of forest resources.
- Environmental Science & Ecotechnology: includes research on environmental science and engineering, environmental technology, and ecological technology, and global change ecology. Includes regularly updated research papers and breaking news articles.
- The Journal of Sustainable Forestry: emphasizes the sustainable use of forest products and services; takes an interdisciplinary approach by discussing topics from the underlying biology and ecology of forests to the social, economic and policy aspects of forestry.
- Nature Sustainability: covers original research from natural, social, and engineering fields about sustainability, its policy dimensions, and possible solutions for a sustainable future relevant to our project, including circular economy, ecosystem services, green infrastructure, natural resources management, and more.

Link to Team Space: https://joinlaunchpad.com/#/projects/3037/forestry-for-a-sustainable-future