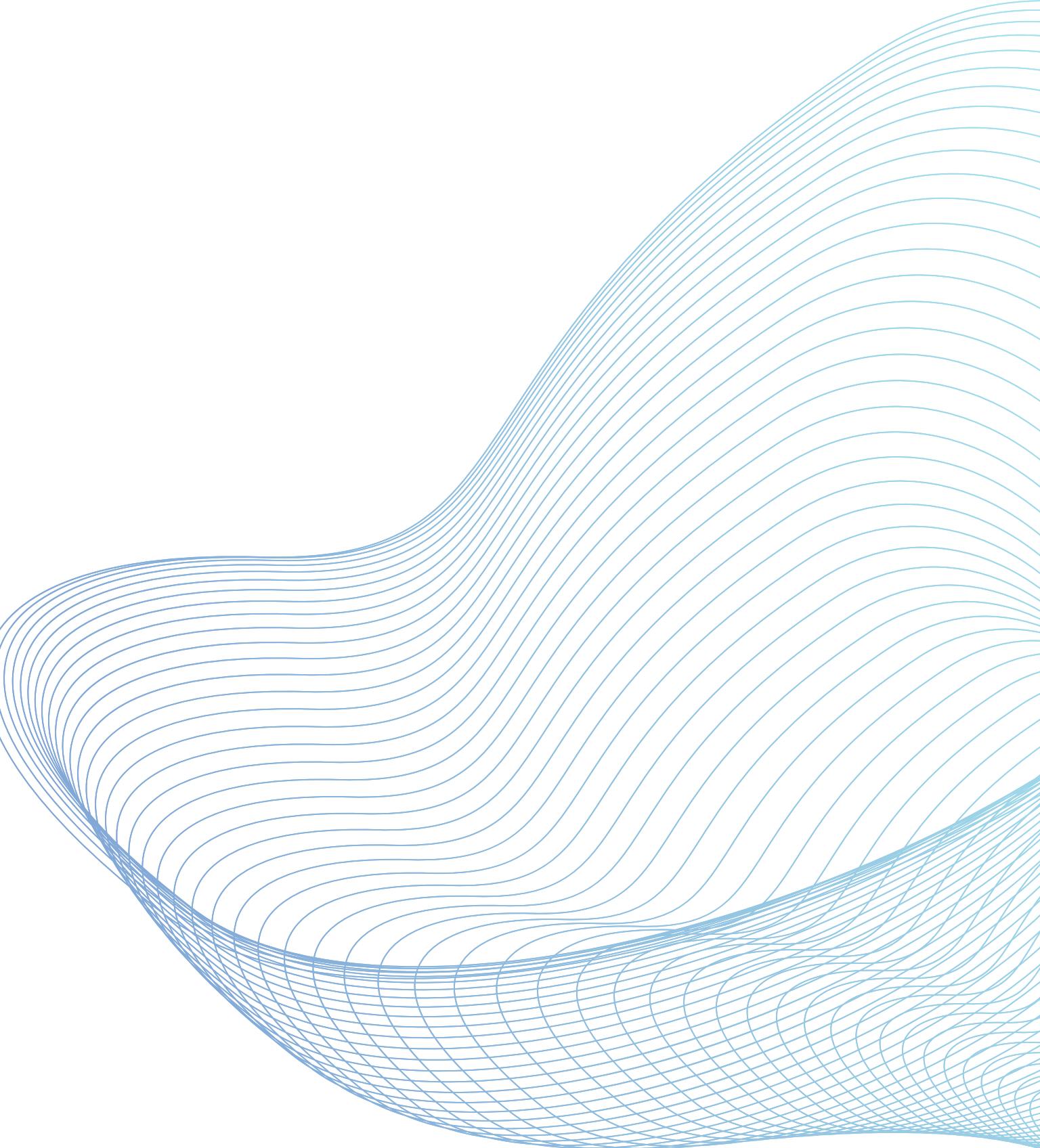


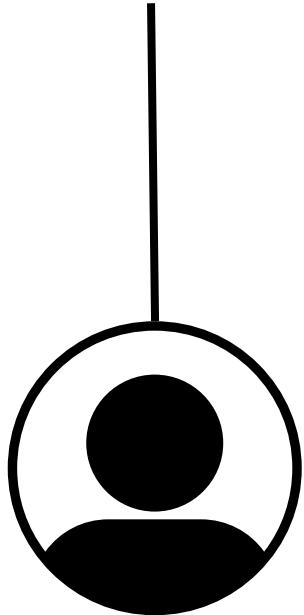
TEAM

POWERPUFFS

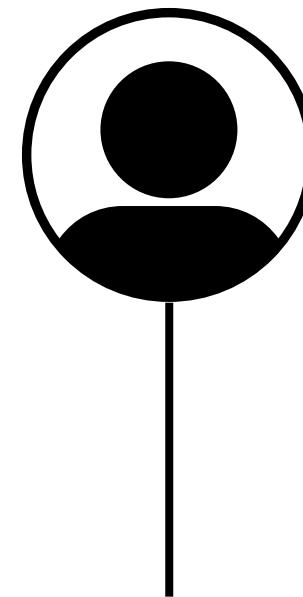


MEET THE TEAM

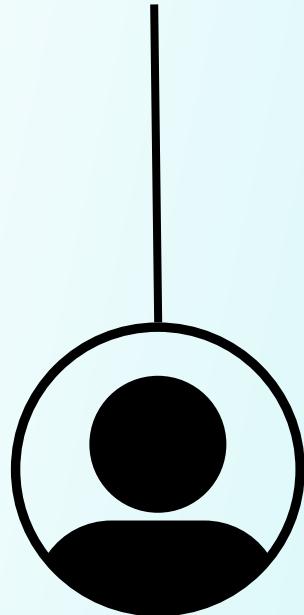
Ishita Pandey
2nd Year CS/ITWS



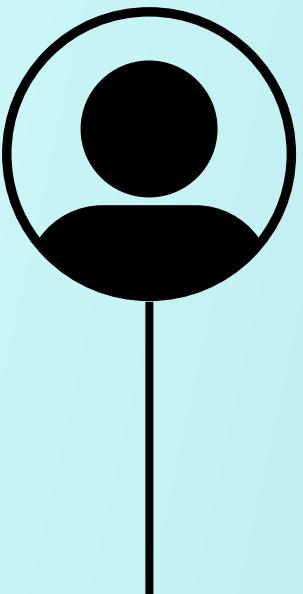
Ben Manicke
2nd Year CS/ITWS



Catherine Chu
4th Year CS

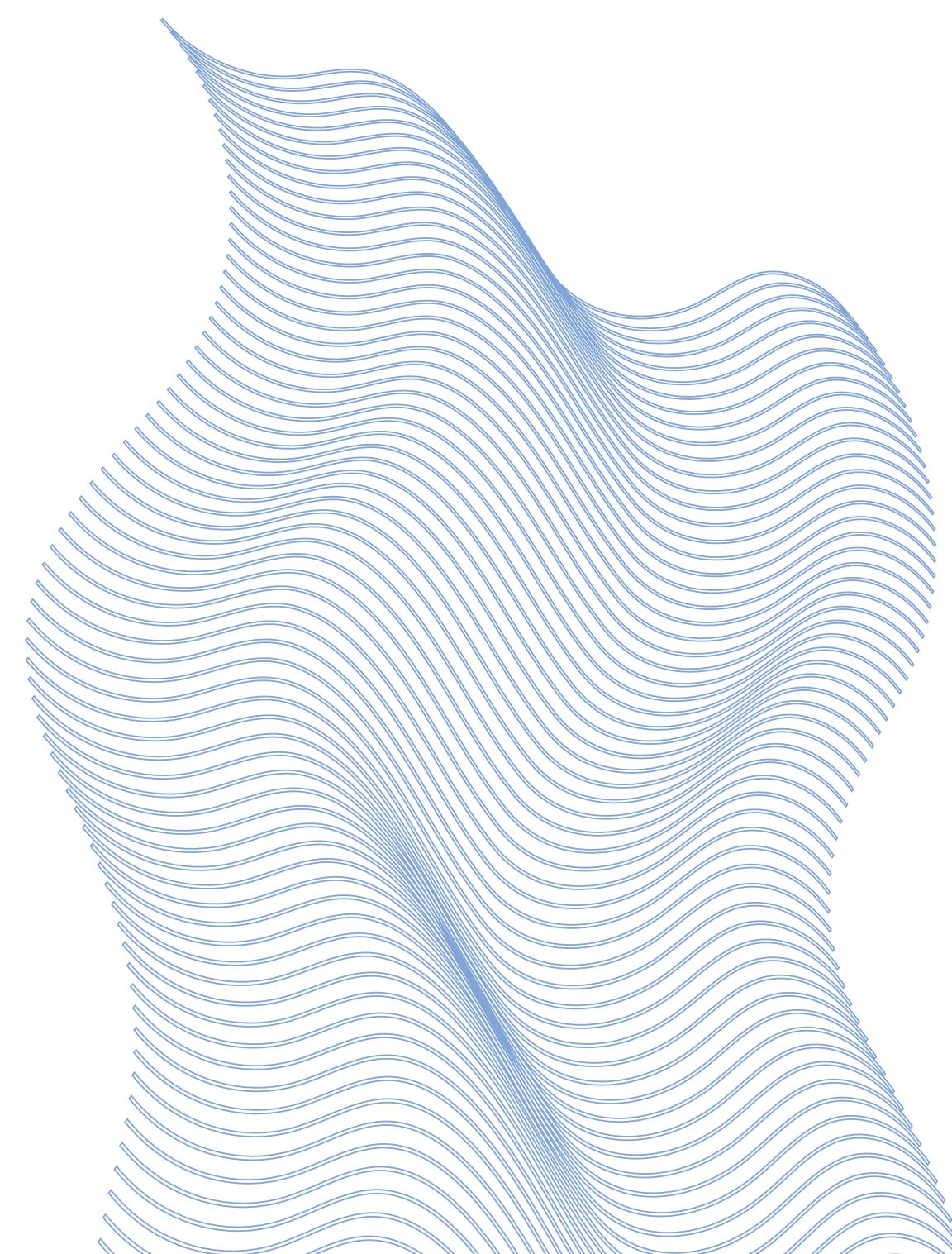


Ryan Zhou
4th Year ITWS



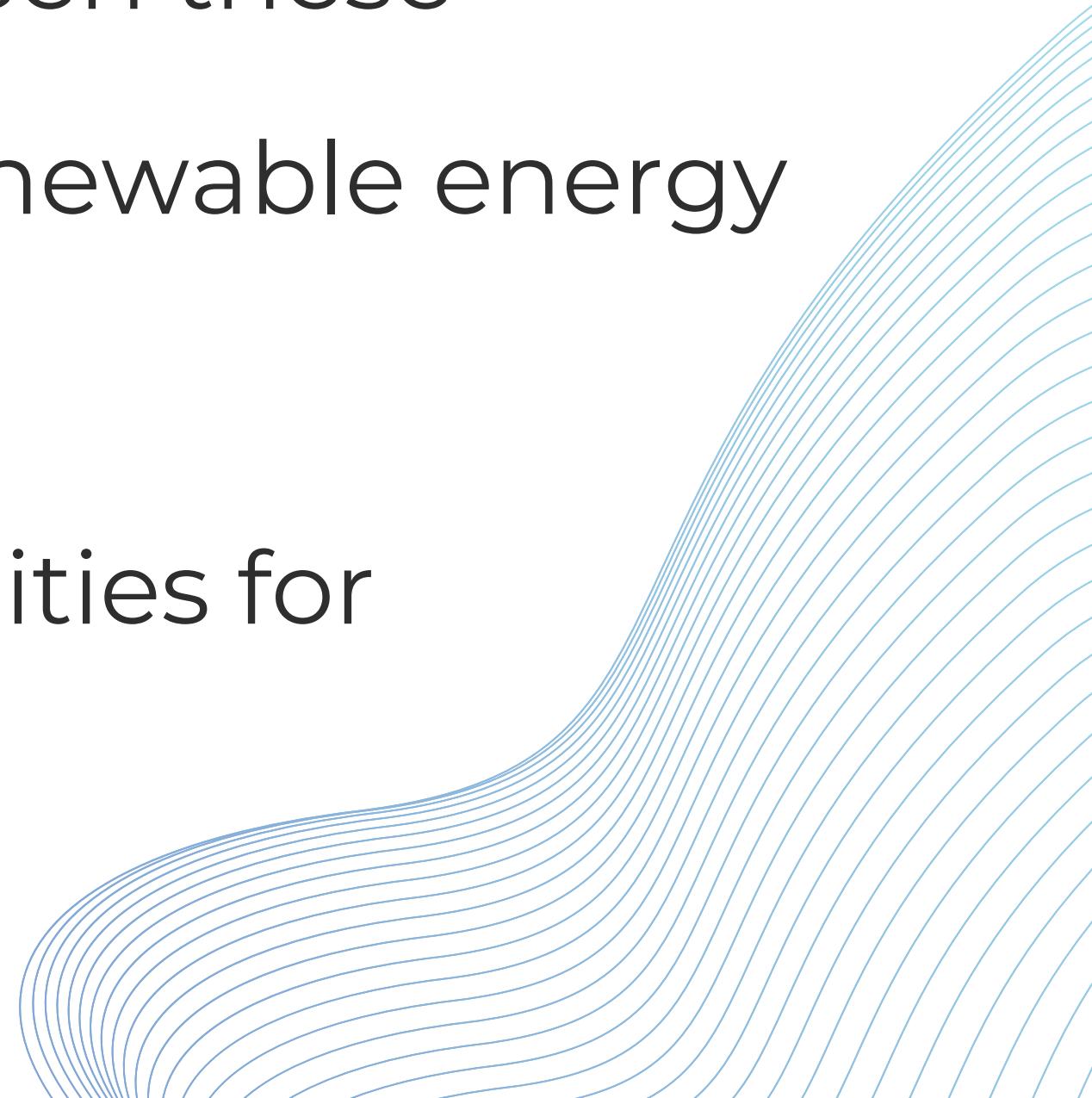
AGENDA

1. Project Summary
2. Technology Used
3. Updates on new features
4. Issues Faced
5. Security Aspects
6. Demo



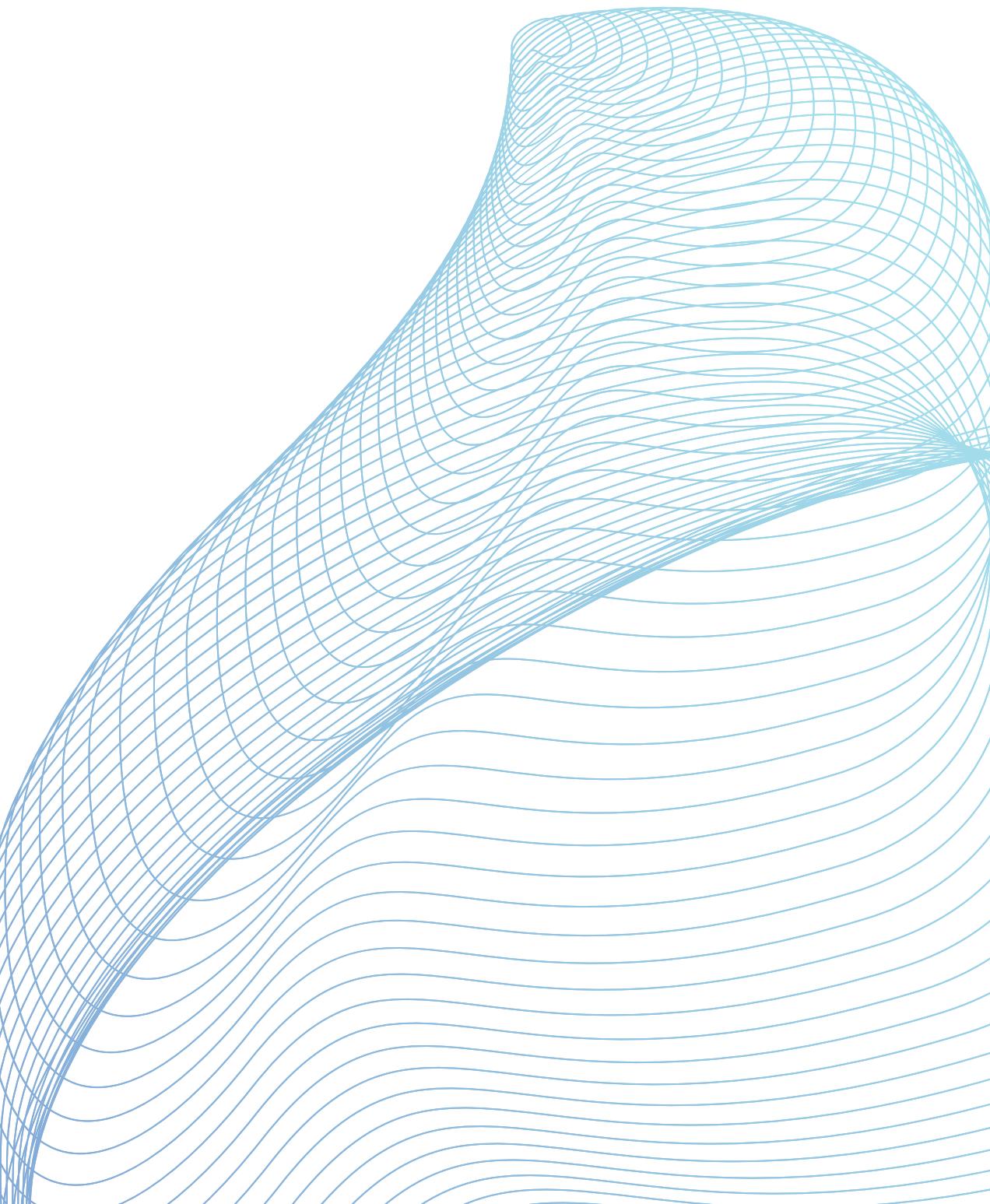
NASA PROJECT

- Exploring data describing environmental elements
- Discovering the relationship between these locations and if they could host a renewable energy plant
- Defining new places and opportunities for renewable energy sources



OUR GOALS

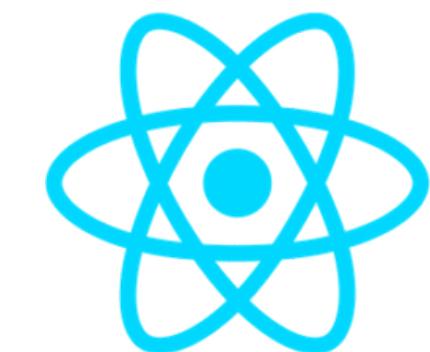
- Educational website that help users explore data
- Create accounts to save and download results
- Help assist with research and problem solving



TECHNOLOGIES



mongoDB®



React



Express



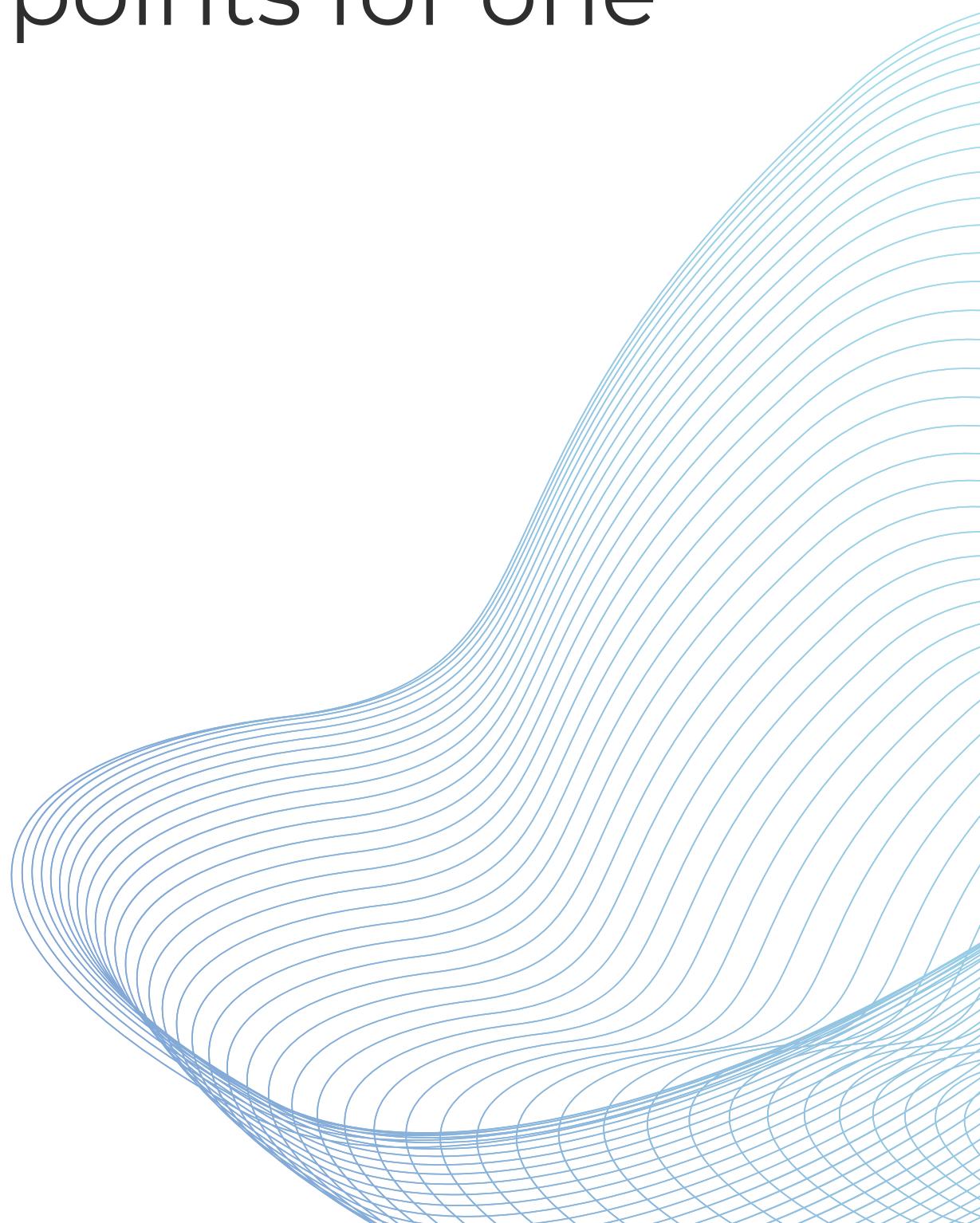
Data-Driven
Documents

UPDATES ON FEATURES

- Search & Filter Feature
- Map Feature
- Login/Create Account Feature
- Profile Feature

NASA DATA/VISUALIZATION

- Pandas & Python for 12 million data points for one day
- Convert to GeoJSON
- TopoJSON + D3 Visualizations
- GeoProjections (geoAlbersUSA)



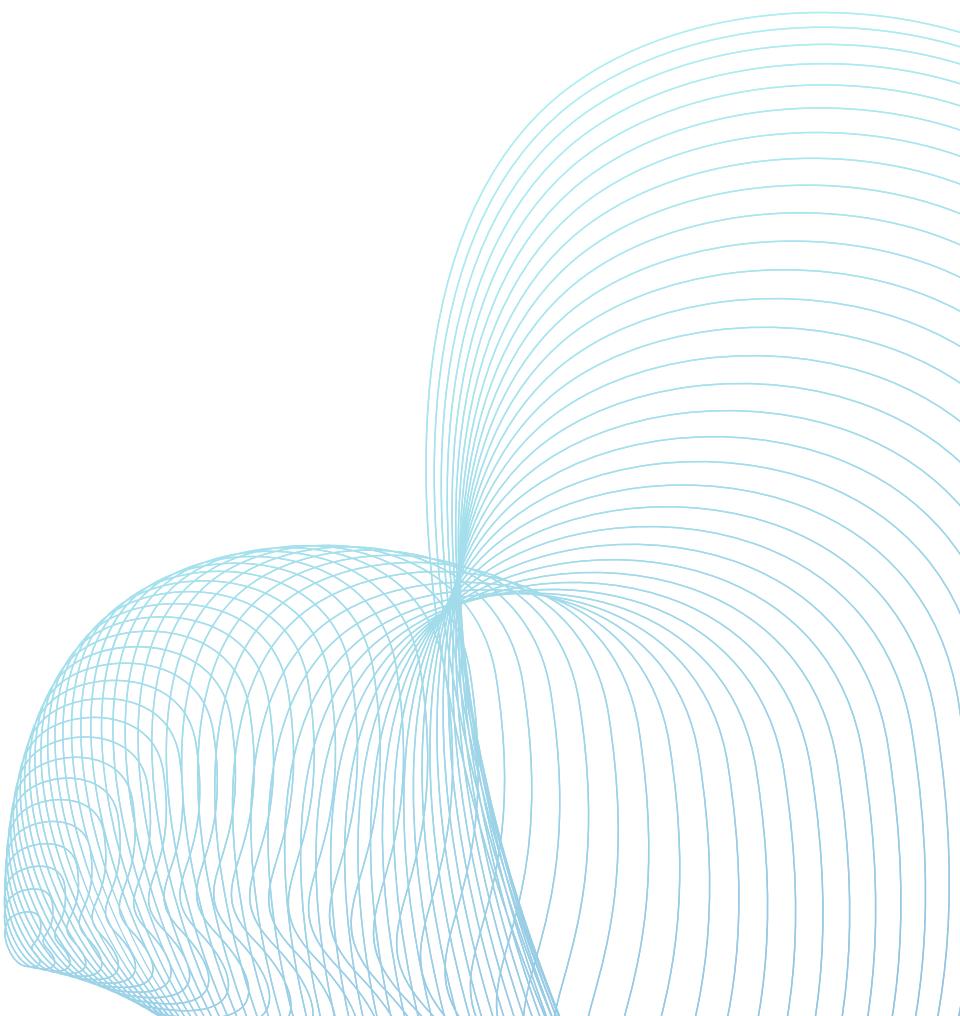
ISSUES FACED

- Projection issue for visualizations
- Cookies for Login
- NASA dataset size/Performance
- VM hosting

SECURITY ASPECTS

- password: SHA-512 (*with fixed salt*)
- RBAC & permission
- Additional Verification for Dangerous Operations
- `Object.keys(document).length`

We care about users' security!!!



NOW TIME FOR DEMO!

THANK YOU!

Questions?

