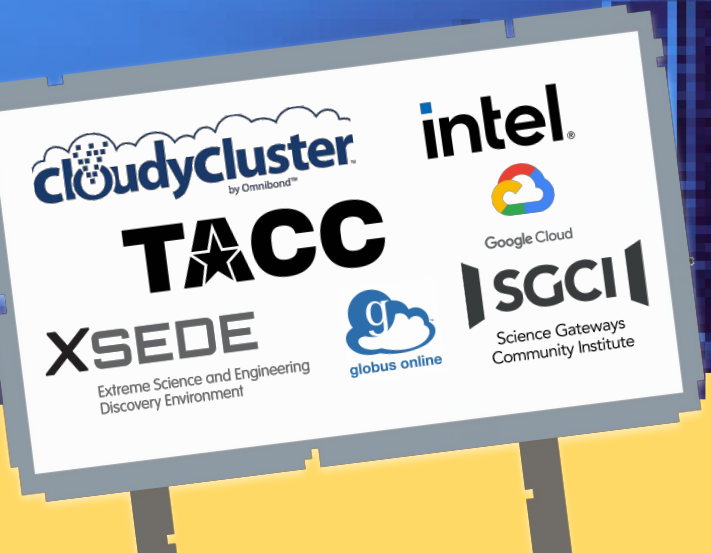
Mentor Pitches



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Team Project Pitches

Choose the project that you like most in the breakout rooms!

[Breakout Room Name] Project Title

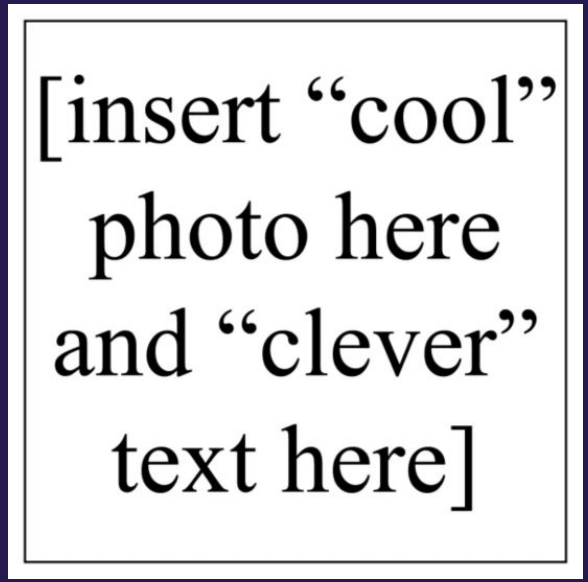
- **[Green Jobs]** Where should we be Teaching for Green Jobs? - Mentor Will
- **[Texas Hold'em]** - Pat
- **[Bio-Sensing Data]** - Quynhmai & AnneClaire
- **[20min Neighborhoods]** - Edgar
- **[A Ping Away]** - Josselyn
- **[Struggles of Education]** - Geoffrey
- **[LAMMPS]** - LAMMPS…. Not just for moths! - Cole
- **[Sonography Success]** - Student Success in the Sonography Program - La Tasha

Example Project Title

Mentor Name - *School/Organization Affiliation*

This slide can duplicated and then modified to add your project pitch idea.

- You do not have to use this template, you can upload your own to this slide deck.
- You will have a maximum of two (2) minutes to pitch your idea. Tip: KEEP IT SIMPLE & PERSONAL!



Suggested Skills / Resource Links

- Programming Language
- Dataset Link
- Example

Where should we be Teaching for Green Jobs?

Will Mobley - *Texas Advanced Computing Center*

Forecasting: How the infrastructure bill will affect job needs in Texas

Suggested Skills / Resource Links

- Data Cleaning
- Python, Javascript
- Statistics, Machine Learning

ecoRise

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Texas Hold'em
Smart Growth?
Health Services?
Public Safety?
A winning hand: data selection, analysis, story-telling
Aces: git, pandas, jupyter notebooks,…YOUR TEAM!
A
Card 2: T or F?
An original fact relevant to DFW/TX that you have researched or a bluff related to card 1
A
A
Card 1: T or F?
An original fact relevant to DFW/TX that you have researched or a bluff
A
J
Hint 1:
A fact or datapoint that correlates to the correct answer.
J
9
Hint 2:
A fact or datapoint that correlates to the correct answer.
.
9
Q
Hint 3:
A fact or datapoint that correlates to the correct answer.
Q
10
Learn more
Resources to learn more or get involved.
10
K
Card 1 is TRUE
Corroborating info and data source
K
The Flop
The Turn
The River
Pat Scherer - tacc.utexas.edu

Bio-Sensing Data Dashboard

Annaclaire Kepple & Quynhmai Tran

Will use Python for web based development and data visualization

Build an online dashboard to visualize a set of environmental data in an aesthetic and user-friendly way

Project Impact: Remote Sensing helps Environmental research by enabling instantaneous data collection to help monitor the changing world around us

Viability/Usefulness:
Making environmental data accessible to researchers to help encourage environmental research

Map with Sensor locations, linked to their data, with charts and graphics for data visualization

Audio Data in .wav files, Atmospheric Data and Soil Data in .csv files

20 Minute Neighborhoods

Edgar Garza - *Texas Advanced Computing Center*

What if cities began to regulate their land use so that every corner of a city was measured by their ability to ensure that basic daily needs could be met via a 20-minute walk?

- Use city/metro data to identify basic daily needs are within 20 minutes (based on type of mobility)
- Basic needs include: food, medical, government, green space, transportation
- Ability to enter your location and receive information of your surroundings via a map or list (sortable by type of need)
- Mobile app, social media integration, webpage dashboard

Suggested Skills / Resource Links

- Python, Jupyter Notebook
- Data dashboard, mobile app
- Social Media integration

A Ping Away

- An application that distinguishes the emotion of a person while being worn(apple watch, galaxy watch, fitbit, etc.) or certain words describing distress.
- Leading to instantly notifying people you feel comfortable with knowing of your situation.

Josselyn Salgado

Email: josselyns45@gmail.com
Discord: Josselyn Salgado(Student Mentor)

Example:

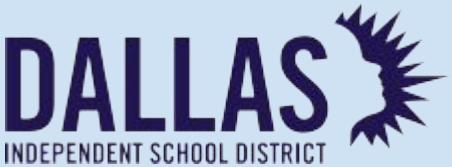
- ❏ Anger
- ❏ Anxiety
- ❏ Fear
- ❏ Happiness
- ❏ Sadness
- ❏ Surprised!

Programs to be Used:

- ❏ Python
- ❏ Java Script
- ❏ Linux
- ❏ Docker

Struggles of Education

Geoffrey Reid - *Texas Advanced Computing Center*



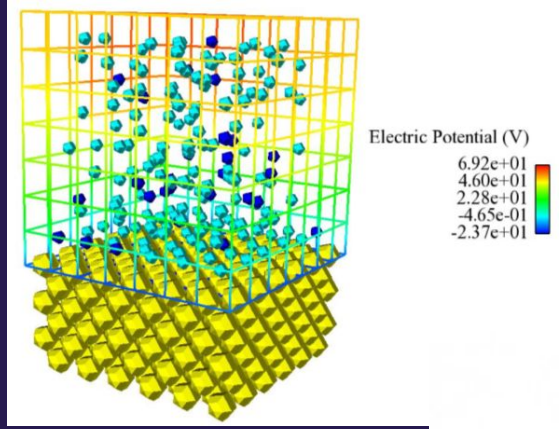
Texas is ranked 31st out of 50 in the nation for education.
https://www.usnews.com/news/best-states/texas

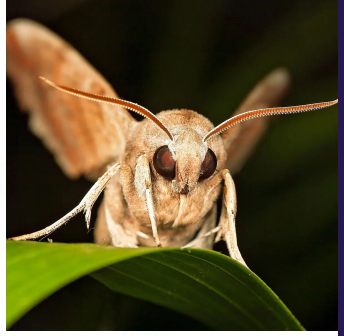
- Identify challenges to education access.
- Create a resource that solves a challenge, changes perception/stereotype

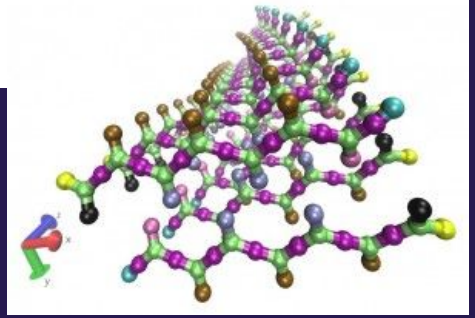
Suggested Skills / Resource to use

- Demographic Data
- How are schools ranked and by what websites

LAMMPS....
- Not just for moths!







Cole McKnight - *Omnibond*

This team will use LAMMPS to process and visualize molecular data to help the people of Dallas.

- CloudyCluster will be used to process and visualize the data.
- The team will be able to decide the type of LAMMPS simulation and molecular data to be processed.

Suggested Skills / Resource Links

- CloudyCluster
- Bash/CLI

Student Success in the Sonography Program

La Tasha Roberts - *Austin Community College*

- **We have a successful Sonography program that accepts 24 students every Fall. The students take rigorous tests and competencies along with skills assessments.**
- **Even with the success of the program, only 14 of the 24 make it to graduation.**

Suggested Skills / Resource Links

- Programming Language
- Dataset Link
- Dashboard

Deliverables:

- **Given all the data, is there a correlation between a student's soft skills and grades to graduation?**
- **This information will be useful to student's success and degree completion.**

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