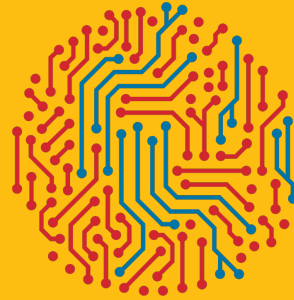


# ENGAGE TO EMPOWER HACKATHON

POWERED BY CORNELL BOWERS CIS DEI



Sep 30 - Oct 2, 2022



# WHAT'S A 'HACKATHON'?



A hackathon celebrates the use of minimal resources and maximum brain power to create outside-the-box solutions (“hacks”) in a constrained time frame.

**HACK + MARATHON = HACKATHON**

# ENGAGE TO EMPOWER HACKATHON

POWERED BY CORNELL BOWERS CIS DEI

Teams comprised of students from technical and non-technical backgrounds worked collaboratively to design innovative solutions **strengthening diversity, equity, and inclusion** efforts across the globe.

A panel of judges selected and awarded \$10,000 to winning teams.

# 36 HOURS, IN A NUTSHELL

**Day 1**

Sep 30, 2022

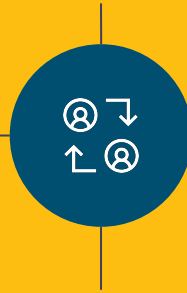


**KICKOFF**

Participating teams  
pre-selected from three  
thematic tracks

**Day 2**

Oct 1, 2022



**MENTOR  
FEEDBACK**

**Day 3**

Oct 2, 2022



**SHOWCASE**

To peers, industry  
representatives, and higher  
education professionals

# THEMATIC TRACKS



## Enhancing Accessibility

How can organizations enhance the accessibility and affordability of their products, programs, and services to support the needs of marginalized populations?



## Empowering Underserved Communities

How can organizations partner with educational institutions to address the social injustice and inequality experienced in underserved communities?



## Enriching Cultural Environments

How can organizations create a more diverse, equitable, and inclusive environment that celebrates difference and fosters a sense of belonging among its constituents?

# Enhancing Accessibility

## Barriers to Internet Accessibility



In recent years, broadband internet and smartphone ownership has generally increased among most American families. However, many low-income households (<\$30,000 annual income) continue to lack these technologies at home. 27% of adults in low-income households are smartphone-only internet users—a smartphone is owned but there is no broadband internet. This means that those individuals are applying to jobs, completing homework assignments (and in some cases attending classes), and performing other various necessities via their smartphones. ([Source 1](#), [Source 2](#))

**How can we enhance the affordability and/or accessibility of internet services to support the needs of low-income communities?**

## Responding to Resource-Limited Communities



Efforts have been made to address the needs of marginalized populations living in resource-limited communities across the nation. However, with the 9.1 percent increase in consumer prices, there has been a surge in economic inequality. According to the United Nations Department of Economic and Social Affairs (2022), *“Rising inflation and declining real incomes are particularly affecting developing countries, where poverty is more prevalent, wage growth remains constrained, and fiscal support measures to alleviate the impact of higher oil and food prices on the vulnerable groups are more limited.”* ([Source 1](#), [Source 2](#))

**How can organizations create affordable products for underserved communities? How can we improve access to affordable housing, education, and health services to who identify as low-income?**

# Empowering Underserved Communities

## Equity in the Face of Artificial Intelligence (AI)



Artificial intelligence (AI) facial recognition appears to be the wave of the future when it comes to rapidly identifying individuals without human intervention. AI is being utilized to screen applicants during the hiring process, identify suspects linked to various crimes, and verify identities in a multitude of settings with the promise of fewer errors due to human biases. However, the National Institute of Standards and Technology found that most facial recognition algorithms do in fact exhibit bias; they falsely identify Black and Asian faces 10 to 100 times more often than they do white faces. ([Source 1](#), [Source 2](#))

**How can we minimize biases while still harnessing the power of AI?**

## Repairing the Diversity Pipeline



Many organizations and institutions have fallen victim to the “diversity pipeline myth”, which is the assumption that diversity initiatives fail due to the lack of qualified candidates from underrepresented groups. In 2018, however, the National Center for Education Statistics reported that Hispanic and Black student graduation rates have risen 350% and 55%, respectively. To add an additional layer of complexity, referrals are one of the most common ways in which jobs are secured. Referral pathways can lead to echo chambers, meaning folks are often referring individuals who share identities with them and thereby retaining the homogeneity of the organization. ([Source 1](#), [Source 2](#), [Source 3](#))

**In what ways can higher education institutions overcome these problems? How can organizations partner with educational institutions to address these issues early in the pipeline and referral process?**

# Enriching Cultural Environments

## Retaining Trans Talent



College is known as a time in folks' lives when they explore their own identity, find their true calling, test out their interests, and build lifelong relationships. For many transgender college students, however, the experience may not be as dreamlike as they imagined. According to the National Transgender Discrimination Survey (2017), trans respondents indicated experiencing barriers including biased behaviors, harassment, bullying, insecure housing, financial constraints due to transition, and lack of financial aid. In some cases, these barriers forced trans students to leave higher education altogether. ([Source](#))

**How do we produce long-term, sustainable improvements in recruitment, retention, and graduation rates for transgender individuals at academic institutions?**

## Belonging in a Virtual World



With the increase of remote work and learning, it has become challenging for organizations to create an environment where individuals feel a sense of belonging and value for their contributions to excellence. According to SWE Magazine (2021), "*Having a feeling of belonging leads to greater engagement and deeper relationships with others and increases retention in a community. It builds personal creativity and resilience.*" ([Source 1](#), [Source 2](#), [Source 3](#))

**In what ways can higher education institutions overcome these problems? How can organizations partner with educational institutions to address these issues early in the pipeline and referral process?**



The background is a bright yellow color. It features several abstract blue shapes: a large one on the left, a smaller one on the top right, and another on the bottom right. There are also several thin white lines scattered across the yellow area, some of which are parallel and slanted.

# HACKATHON PARTICIPANTS

HACKATHON PARTICIPANTS

# 164

bright & talented students



HACKATHON PARTICIPANTS

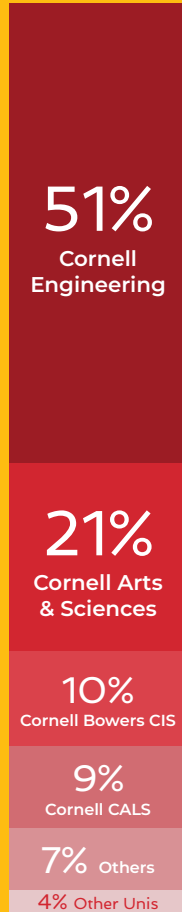
33

passionate teams

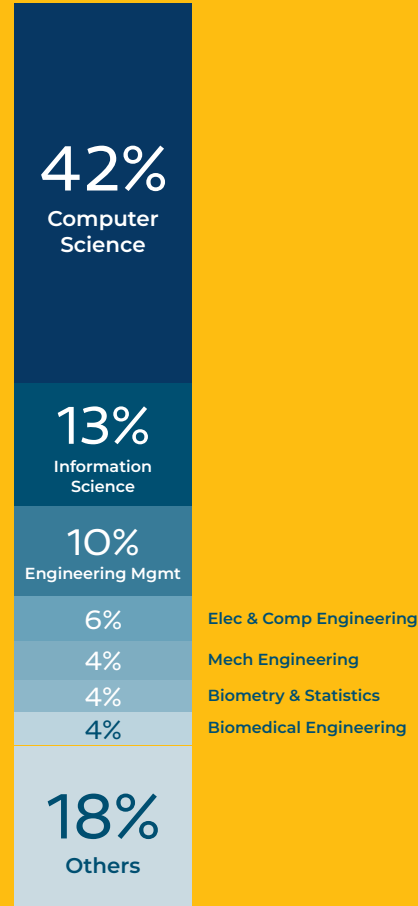


## HACKATHON PARTICIPANTS

### By college



### By major



### By graduation



## HACKATHON PARTICIPANTS: TOP 8

### Enigma **GRAND PRIZE**

*Pinch* provides more accessible internet by optimizing the use of data by filtering out unnecessary advertisements, animations, videos, visuals, and audio files.

Jonathan Feng, Joseph Tung, Karim Pareja, Rachel Bonnet, Talia Rubeo, Zubin Bhaumik

### Bars 2 Bandzz **MOST IMPACTFUL**

In order to reduce America's recidivism, *Linked 2 Tech* aims to expose prisoners to careers in tech and support them through getting a job.

Adeyinka Oyemade, Celeste Naughton, Dasha Griffiths, Himma Aklilu, Judith Jatto, Samuel Yeboah

### The Kit Kats **MOST DEVELOPED**

*TheraMe* is a school-based mental health solution for middle and high school students

Harmony Prado, Maité Sadeh, Mia Kelly, Richlove Nkansah, Daniel Peter

### ATrack

Ambulance tracking website for rural communities that provides a framework for emergency services to display information to callers.

Akshay Undevía, Hehong Li, Katherine O'Connor, Sophie Alber, William Huey

### Purple Potato

Smooth out networking processes by including peers in a three-way coffee chat.

Alix Liu, Kay Zhang, Meichen Zhou, Xiaoyi Li

### Hackatron **BEST DEMO**

*\$avor* improves the lives of food-insecure people in EBT by offering a tool to budget, plan meals, locate stores, and stay informed about updates to the program.

Andrew Zhang, Avery Colburn, Claire Yun, Mohammed Oshikoya

### Hurricane-e-scapers

*ReFair* is a college-run refurbish and repair system where old university laptops get redistributed to students really needing them.

Jesus Omar Sistos Barron, Marlou Boerkamp, Tanuj Chawla, Vaibhav Bisht

### The Sleuths

*equiDATA* is an AI ethics consulting firm that seeks to reduce racial bias in facial recognition by bridging gaps in datasets.

Amir Rafeeuddeen, Amirah Ricks, Chit Sum Eunice Ngai, Sonjay Lake

## HACKATHON PARTICIPANTS

### Avatar

Build a professional community in a hybrid work environment with an app that takes in user interests and suggests people to connect with.

Abdul Hannan Mohammed, Maya Devarajan, Nikhar Jain, Oluebube Chukwubuikem, Sabastian Highton

### BeBold

We are an organization that compiles data sets to help combat bias found in artificial intelligence technology at its root.

Diana Flores Valdivia, Iman Kiio, N Kitil, Natalina Putrino, Daniela Ramos Ojeda, Nicole Onyemeziem

### Big Red Adaptive Play and Design

Austin Vollweiler, Maya Yu, Michael Dicipinigaitis, Michelle Card

### BiscuitOT

Promote inclusion by pairing people by their interests and personalities to build effective relationships that promotes a sense of belonging.

Andrew Kim, Daniel Xie, Kevin Xiang, Sudeepa Kolli

### Brute Force

*Bridge* connects professionals with high school students to provide guidance and mentorship that they would otherwise lack.

Rakshita Nalwaya, Ananya Jajodia, Ashutosh Garudapalli, Priya Bhavana Uppalapati, Rishi Kaashyap Balaji

### Diversity4you

Antek Sack, Dakari Harris, James Larson, Spencer Hurst, Teddy Lazar

### Empower Rangers

Chance encounters have become obsolete with remote work, so we created simulated "water cooler" sites to foster spontaneous conversations.

Edz Cabral, Jordyn Vu, Matthew Zhou, Yijia Dai

### FIN-S

*Vent.ai* is a software platform for frustrated or distressed employees to anonymously submit complaints that otherwise may not have been submitted to HR.

Aakash Murugan, Aleksandra Marjanovic, Larson Ortiz, Puloma Bishnu, Robin Liu, Tanay Vedartham

### FLY-EZ

Implement resource utilization analysis and an automated matching process to improve diversity goals for organizations.

Ellen Li, Jiarui Yang, Ray Fang, Zhixin Wang, Ziyang Liang

## HACKATHON PARTICIPANTS

### HEARD

*HEARD* is a healthcare assistant bot providing a categorized summary of patients' consultations and relevant information on their illnesses to improve health situations.

Anoushka Rakesh Kabra, Gary Wang, Jazmin Abril Lagier, Joyce Gorospe, Mohammed Almohsen, Yuexing Hao

### Heart Attack

Resource-limited communities are regularly underserved by the healthcare industry. We propose kiosks offering free digital consultations.

Catherine Tom, Robin Ahn, Troy Moslemi, Vinh Le, Youn Sung Huh

### Hy-Line

A platform that connects underrepresented students with mentors in industry in a relaxed and comfortable environment.

Britni Canale, Carina Suguita Chao, Carson Wolber, Eshaan Kaul, Miranda Yang, Nathaniel Garcia

### The Infinity Stones

An app allowing individuals with excess internet to sell and share this at an affordable price to low-income individuals lacking access to affordable and accessible internet.

Aaradhya Gyawali, Aditi Manohar, Evan Leong, Marcus Lee, Shruti Awale, Tony Chen

### J-Spice

*Kindred* is a platform aimed at mid-sized (~500 employees) companies hiring new employees in a hybrid setting, effecting an expected 5% increase in productivity.

César Cisneros, Eva Ruse, Isha Patil, Jaan Nashin Singh, Patrick Keeley, Sreya Jonnalagadda

### Kaleidoscope

Diversity Pipeline in Recruitment: An Anonymous Hiring Tool based on *Handshake*

Emily Mei, Nilaya Meda, Phuong Mai Huynh Pham, Saikant Sheshrao Kamble, Xueming Chen, Yanjun Zhao

### MID

A digitalized university identification system that assists transgender individuals with self-expression and security in anonymous networking.

Charlie Wright, Michelle Dai, Shravanika Kumaran, Zach Garcia

### Pegasus

*Pegasus* is a web platform that facilitates mentorship between low-income students and SUNY / CUNY students, as well as being a resource hub for increasing college-readiness.

Aaron Brown, Adam Fofana, B.J. Roxane Ouango, Michael Egbueze, Monique Rampersaud, Obioha Chijioke

### Pink Tank

People from underserved communities want their challenges heard and want guidance within organizations. We're forming a team of buddies who people can reach out to for help.

Aditya Rajendra, Ashtekar Aishwarya, Bhaskaran Charlotte de Lastelle, Siddhant Mukherjee

## HACKATHON PARTICIPANTS

### Race Car

A networking platform to build a virtual community among students. Users can be mentors or mentees during randomly matched meetings, where they learn or share about a topic of their choosing.

Marta Liang, Michael Ye, Shreya Majumdar, Shrinidhi Rao Aroor, Taeheun Lee

### Round One

A web-based application that allows students (ages 4 - 11) to track and complete homework assignments in a fun and interactive way.

Daniel Wong, Jack Chen, Kenneth Chiem, Stanley Chen

### The Saplings

*Sapling* is the smart workplace software for your new hires that elevates the onboarding experience with a built-in intelligent chat bot.

Ishaq Mohamed Said, I-Shen Wu, Priya Bhashyam

### Sprouts

Classes for college students that will solve real-world company issues using skills they learned in past and current courses.

Alisa Castillo, Angelica Borowy, Jose Vizueth, Daniel Baldeo-Thorne, MahNoor Abbas, Rachael Close

### STACKS

Train a model with a balanced dataset through supervised learning that is better at identifying people with darker skin.

Chris Choilee, Jacqueline Cai, Kate Zhang, Mary Yuan, Zhihui Liu

### TBD

Platform designed for users to connect people seeking workspaces, devices, and services with hosts willing to rent them.

Cathy Miao, Deepthi Nandroli Vishwanatha, Mei Ling Wood, Prem Kumar Mullai Manavalan, Vivian Huang, Yuqing Wu

### Team 4

A space school that creates opportunities for low-income students to enter the space industry, reducing socioeconomic disparity.

Aihang Jin, Ainslie Hackett, Calvin Lee, Isha Garg



“What I did this weekend was completely unrelated to my major—I liked bringing a new perspective to the table and I like knowing that I can bring some of what I learned here into my normal academics.”

- PARTICIPANT FROM FEEDBACK SURVEY





# 36 HOURS IN PHOTOS

ENGAGE TO EMPOWER  
**HACKATHON**  
POWERED BY CORNELL-BOWERS-CIS-DEI



**WELCOME**









# WHY PRESENT?

You've heard it before...

**KNOW YOUR AUDIENCE.**

Let other people know what you made.

- Same font. Color scheme
- Different font sizes.
- Character Spacing!

Font

Futura

Medium 54 pt

B /   ⚙️

**Advanced Options**

Character Spacing 0%

Baseline Shift 0 pt

Baseline Default











ENGINEERING QUADRANGLE

### DAY 1 FRI, SEP 30

10:00 AM - 12:00 PM Mentoring @ Team workshops  
12:00 PM Lunch @ Goldman Lounge  
1:00 PM - 2:00 PM Personal Coaching Sessions @ Terrace outside Motiv's Cafe  
2:00 PM - 3:00 PM Mentor Training @ Phillips Room 101

### DAY 2 SAT, OCT 1

8:00 AM - 10:00 AM Team Updates @ Phillips Room 101  
10:00 AM - 12:00 PM Mentoring @ Team workshops  
12:00 PM Lunch @ Terrace outside Motiv's Cafe  
1:00 PM - 2:00 PM Personal Coaching Sessions @ Terrace outside Motiv's Cafe  
2:00 PM - 3:00 PM Dinner & Networking @ Goldman Lounge

### DAY 2 SAT, OCT 1

10:00 AM - 12:00 PM Breakfast & Team Submissions @ Goldman Lounge  
12:00 PM - 1:00 PM Project Demos @ Assigned Rooms  
1:00 PM - 2:00 PM Lunch @ Terrace outside Motiv's Cafe  
2:00 PM - 3:00 PM Retrospective @ Phillips Room 101

### DAY 3 SUN, OCT 2

10:00 AM - 12:00 PM Breakfast & Team Submissions @ Goldman Lounge  
12:00 PM - 1:00 PM Project Demos @ Assigned Rooms  
1:00 PM - 2:00 PM Lunch @ Terrace outside Motiv's Cafe  
2:00 PM - 3:00 PM Retrospective @ Phillips Room 101

### RULES & G...

**TEAM SIZE**  
Recommended: 3 - 5 members

**TEAM REGISTRATION**  
Complete form by 9:00 AM  
Fill out your team roster and...

**FINAL PROJECT**  
Deadline: 9:00 AM on Sun,  
Team Name, Team Photo, Title  
Description, Description 2-300 words

**NAME TAGS**  
Must be worn at all times, also...

### JUDGING

**Solution Development**  
Highly developed for  
well-defined user groups can  
be deployed easily.

**Novelty**  
Novel technical, highly  
creative, and/or innovative  
designs which  
demonstrate...

**Scale of Impact**  
Highly resonant with clear  
measurable impact, scalable,  
able to meet market  
demand for impact breach  
through...

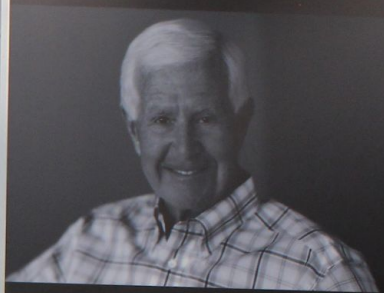
**Analysis**  
Strong use of data and  
demonstrates...



## CORNELL ENGINEERING DISTINGUISHED ALUMNI AWARD

The Cornell Engineering Distinguished Alumni Award, founded in 2018, proudly recognizes an alumnus or alumna whose extraordinary leadership and vision have pushed traditional boundaries and transformed the world, and whose professional accomplishments bring pride and distinction to the College. Awardees are chosen based on their success in their profession, exceptional leadership, and strong commitment to the Cornell Engineering community. The award will be bestowed annually.

QUESTIONS  
CONTACT  
SCHEDULE  
DEADLINE  
AWARDEES  
NOMINATIONS



2018

Dave Duffield holds two Cornell degrees - Engineering Class of 1962, with a major in electrical engineering, and Johnson Graduate School of Management Class of 1964. He is a visionary engineer, serial entrepreneur, and extraordinary philanthropist.

In 1987, Dave founded PeopleSoft, an enterprise software company that became a world leader in the higher education, manufacturing, finance, and human resource industries. When PeopleSoft was acquired in 2005, he co-founded yet another global software company, Workday, which provides cloud-based human resource, financial, student, and analytics applications to the world's largest companies, educational institutions, and government organizations. As chairman of Workday's board, Dave continues to embody and promote the company's core values: a strong commitment to employees, customer service, innovation, integrity, and fun.

Dave's other business software companies include Integral Systems, Business Software Corporation, Information Associates, and his newest startup, Ridgeline.

Beyond his impact on industry, Dave, together with his wife Cheryl, is committed to improving lives and livelihoods through philanthropy. To honor his parents, Dave funded and named Cornell Engineering's iconic nanoscale science and technology building, Duffield Hall. The Duffields are also active donors and supporters of animal welfare through the Cornell University Maddie's Fund, which is devoted to revolutionizing the well-being of our animals.



IRWIN M. JACOBS '64





Statement:  
 - How might we reduce the recidivism rate by increasing the amount of post-incarcerated ppl in tech?

**Goals**

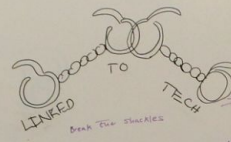
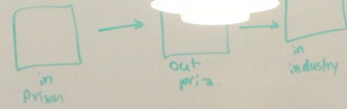
- Detail plan + timeline of our idea
- Pitch is 6-250
- really detailed
- finished out
- imagine a persona

**IDEAS**

- Innovation → Industry
- Programs for made + outside job
- Incentives of program
- Real incarcerated program

★ AKA to present

WHY TECH ≠ OUTCOMES



**Presentation**

- Idea process
- Problem statement
- Beginning plan
- Plan evolution
- Execution

Linked to Tech

- why →
- underrepresented in field
  - fast growing
  - don't need degree
  - Remote
  - always long, Job long

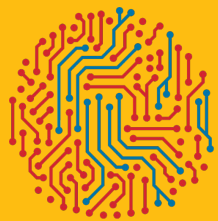
In Prison → Beginning stages → Road To Industry



program → By Google  
 maybe supported  
 what are we  
 building  
 on system

take the same program's  
 specificity  
 use skills  
 create program  
 that is a strong  
 link to tech





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