Research Match

Deadline Tech

Research Match (Elevator Pitch)

- 55% of Emory students undertake a research project with a faculty mentor
- Steps to join a research lab:
 - Identify Field
 - Find Principal Investigators
 - Email Investigators.
 - Wait
 - Repeat
- What if we could either facilitate the completion of these steps and increase the ease of the process, or eliminate these steps entirely and simply connect undergraduates with principal investigators based on the needs and requirements of each?

Why Research

 Conducting research is an important part of the undergraduate and graduate experience.

\$520 Million

- Research is an important prerequisite to many fields post college.
- The idea of research or finding research opportunities can seem like a daunting task to many incoming students.
- Even students who have established themselves in labs may look for other opportunities such as changing their roles or experiences from a dry lab to a wet lab or vice versa.

Why Research Match

- There is difficulty in finding relevant labs and students may need to research through many different webpages to find labs that are willing to take undergraduates.
- Students devote time and energy in order to find opportunities. This app will alleviate the cost of time and energy to the student.
- Many students cold email labs and PIs.
- Many research opportunities get filled internally through a student in the professor's class or network due to the lab not advertising any openings.
- It is difficult to find research that is interdisciplinary between academic majors/minors and relevant to niche interests.

The Intended Users: Students

- In essence, the users of such a platform would be undergraduates with an interest in research.
 - Possible expansion to integrate high school students and graduate students.
- Our focus will also begin with Emory undergraduate students which comprise of about 7,000 Students.
- Major improvement from current resources for finding research opportunities which are mainly lists of program links and how to guides on cold emailing
- For students, Research Match provides a platform to engage in research at Emory by removing unnecessary obstacles

The Intended Users: Research Mentors

- Principal Investigators of a variety of different disciplines.
 - o Biology, Chemistry, Biochemistry, CS, Humanities, Art, etc
- Postdocs and graduate students in need of additional support with their projects
- For research mentors, research match provides a streamlined platform to fill positions within their lab with well qualified candidates
- Departments that support Undergraduate Research at Emory could use Research Match as a tool to better facilitate on campus connections

Feature List

- Database of Information from specific labs.
- Student Profiles
 - Student Files (CV, resume)
 - Student interests
 - Student time dedications
 - Student goals and aspirations
 - Professor recommendations
 - Classes Taken
- Labs can make profiles regarding generic qualifications for their lab and update their information once a semester:
 - Required classes if the app is specific to emory
 - Prior knowledge
 - Required time commitments
 - Commitment length
 - Number and type of students they are willing to accommodate
 - o Paid/Unpaid/Credit
 - Project type
- Match algorithm to sort through profiles and provide suggested pairings between labs and students

Tools and Technologies

Git, GitHub: distributed version control.

Bun: all-in-one JavaScript runtime, test runner, bundler, and package

manager.

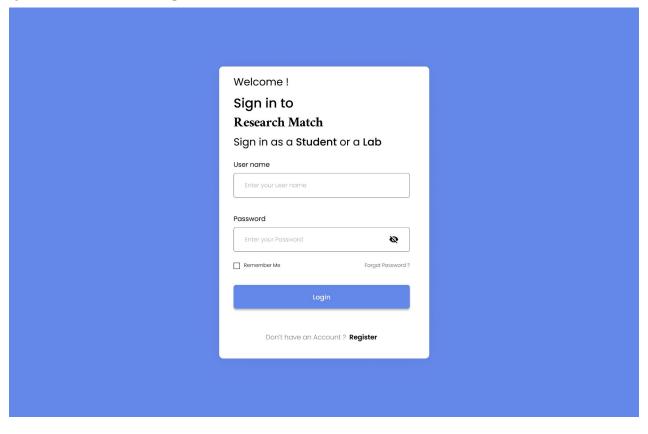
HTML, CSS, JavaScript

SQL, PostgreSQL

Libraries: Axios



Prototype - User/Student



Welcome Back!



Samantha Smith

GPA: 3.5

CS Major

Psych Minor

Biography:

I'm a rising junior at Emory University. I'm majoring in CS and minoring in Psychology. I'm looking for a research opportunity to build my technical skills and incorporate my interest in web development.

Resume/CV/Transcript:

Files) Sama

Samantha_Smith_Resume.pdf

Add



Classes Taken:

CS 370 Spring 2022 CS 350 Fall 2022 CS 377 Spring 2022

CS 326 Fall 2021

Add Class (+)

Opportunities



Casey Lab

Taught CS 370, CS 350









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If you're an undergraduate student passionate about healthcare technology and looking for a meaningful impact, we invite you to join us in advancing the Medical Archive of Emory. This is an unparalleled opportunity to apply your skills in software development, data science, or UI/UX design in a real-world healthcare setting. You'll be working alongside seasoned professionals and researchers, using cutting-edge technologies like machine learning, cloud computing, and API development.

Matches



Graham Lab

Taught CS 370, CS 350





Lab Dates: 10/2/23 - 12/8/23 Schedule: MWF 2:30 - 5:30pm

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Current Labs:



View for Details

Past Labs:



Smith Lab 1/9/2023 - 5/8/2023

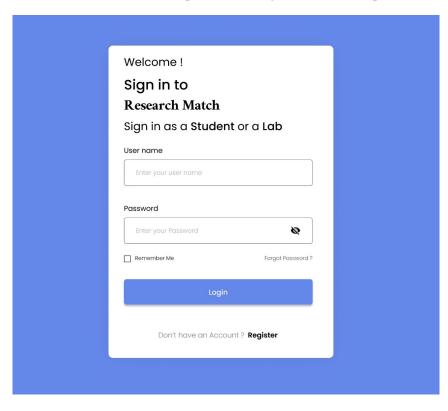
Biochemistry

Biosynthesis

View for Details

Microbiology

Prototype - Researcher/Professor/Lab



Welcome Back Smith Lab!



Smith Lab

Biochemistry

Biosynthesis

Microbiology

Requirements/Prerequisites:

Students who have completed up to and including CHEM 203, BIO142, and BIO233

A minimum of 10 hours commitment a week

Familiarity with Lab techniques such as pipetting, pouring agar plates, making solutions, and aseptic techniques.

About the Smith Lab:

The Smith Lab is a microbiology lab at the Emory Biology department. The primary goal of the Smith Lab is to explore and catalog the diversity of microorganisms in various environments. This includes identifying and classifying bacteria, archaea, fungi, and protists using molecular techniques such as DNA sequencing, PCR, and metagenomics.

Lab Schedule:

Smith_Lab_Schedule.pdf

Add (+)

Matches

Research Match



Graham, Casey

Class of 2026 caseygraham@gmail.com

in linkedin.com/in/caseygraham

View full profile

Message

Accept



Smith, Rebecca

Class of 2025

rebeccasmith@gmail.com

in linkedin.com/in/rebeccasmith

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Message

Accept

Student Profiles



Graham, Casey Enrolled in Chem 350 and Bio 233

caseygraham@gmail.com

in linkedin.com/in/caseygraham



Match 🕀

View full profile

My name is Casey and I am a 2nd year student at Emory University Majoring in Biology. I am interested in Microbiology and a wet lab experience.
I can commit to 15 hours of research a week.

I have experience in the following: Micropipette, PCR, and Gel Electrophoresis.

Sustainability



EMORY | COLLEGE OF ARTS AND SCIENCES

Undergraduate Research Programs

Profiles on research match would need to be regularly maintained.

Since the platform aligns with the mission of the Office for Undergraduate Research Programs, administrators could maintain and prune profiles as needed to keep the platform up to date.

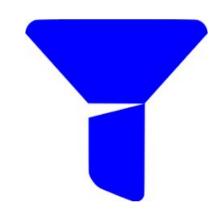
Potential Risks

Designing a database and finding an appropriate dataset

Designing a platform that can be easily maintained across academic years More students looking for labs than professors looking for students







Questions?