

## "Duke Research Hub" Project Milestone 2

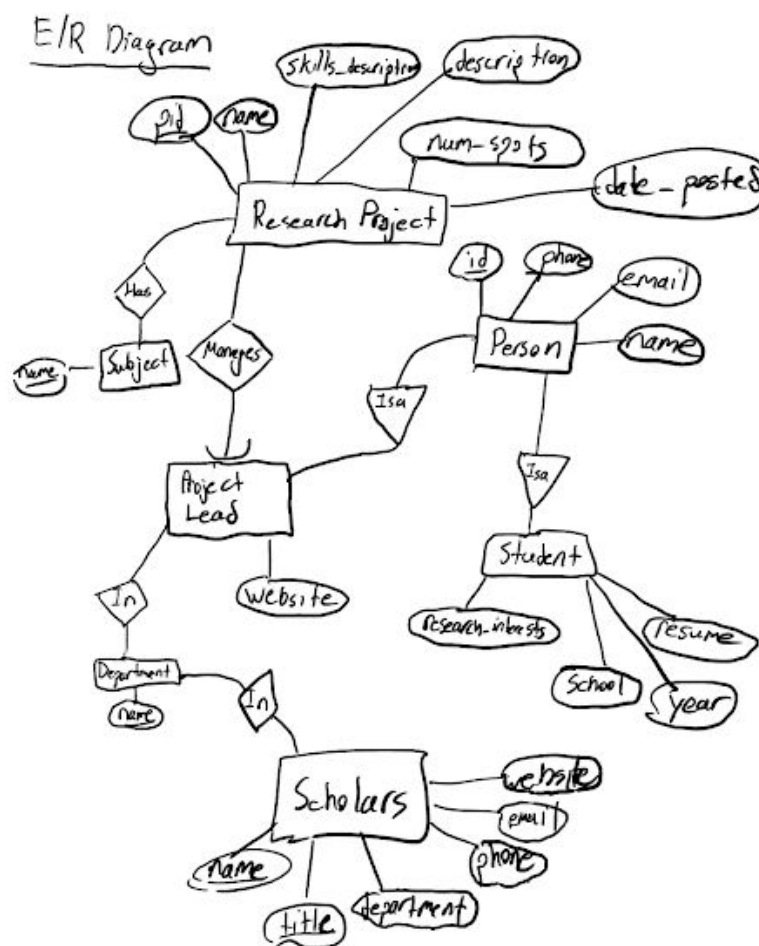
Christian Burke, Samuel Chan, Vinit Parekh, James Rumsey, Justin Suh

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### New Assumptions

We are planning on revising our original design by removing the page of Students and their information, as we believe that it is impractical and less necessary. However, we plan on keeping the Project page, which is a dynamic page of projects and their details, and the Scholars page, which will be a static list of the faculty members associated with research. We hope that students can use this page to obtain information about professors and email them, even if they do not have explicit projects posted. We plan on gathering data to fill the database, at least initially, by randomly generating fields for the Project tables and web scraping for the faculty tables.

### E/R Diagram



### List of Tables

Person(id, name, email, phone)

LeadInfo(id, website)

LeadDept(id, department)

StudentInfo(id, research\_interests, resume)

ProjectInfo(pid, name, num\_spots, date\_posted, description, skills\_description)

ProjectSubject(pid, subject)

Manages(pid, research\_lead\_id)

Scholars(name, title, department, phone, email, website)

### Brief Description of the Platform Chosen

We decided to use React as a platform for our final web application. React is a javascript library that has a lot of functionality for designing user interfaces. This is built on top of a Flask web app that uses PostgreSQL on the backend with SQLAlchemy.

Frontend: Javascript/React/HTML/CSS (Redux manages state how data moves from one to another, info stored in properties, states used to pass info from one child to another)

### Changes Made to Database/ Additional Indexes created

We removed the StudentMajor and StudentSubject tables, as we will be, at least for now, no longer implementing the student page of the website. We added the Scholars table to the database which will be the table that will be queried to fill the static faculty page.