### **Step 1: Brainstorm ideas**

Team JACT Ideas

* JUSTFAIR data for other states
* Different data vis program
* Look at other right to info act data
* Look in more detail in MI data
  + Crimes, judges
* Build ML model to predict how cases will be decided
* Look at # arrests by crime
* rates of successful prosecution
* Judicial data from other countries.
* More detail fed judges
* Demographics on lawyers; public vs private, etc
  + Corr. between win rate and lawyer pay
* Supreme court justices stuff
* Bias in judicial system over time (ML, time series)
* Continue with circuit court scraping / FOIA

Ideas from Jude Higdon, QSIDE Project Sponsor:

* Setting up foundation of analytical steps for all JUSTFAIR projects
* Small town policing analysis
* Bringing social justice and data science into high schools
* Financial data analysis relating to modern slavery/human trafficing

### **Step 2: Selection Criteria**

Extend the selection criteria your team came up with from the 0216 brainstorming assignment. Come up with criteria that are easily enumerated and comparable. Refine the list as you better understand your own preferences. Describe each selection criteria in detail (1-2 sentences) such that people outside your group will understand them.

* Possible to do within the timespan of a semester for a group of undergraduate data science students.
  + The projects must be able to be completed within a semester by undergraduate students who have busy schedules and broad, but still somewhat limited expertise. Is this project too broad or too narrow in its scope?
* Within the realm of the QSIDE Institute’s mission statement.
  + QSIDE’s mission is to bring quantitative expertise together with expertise from the social sciences, humanities, and arts to discover the impact and scope of injustices, and to build solutions to remedy them. Does this project further that goal?
* For those that require data analysis, it must be feasible to obtain the necessary data.
  + Some data is not easily accessible, as we’ve discovered this semester. Are there clear sources where this data could be found?

### **STEP 3: List Reduction**

Group your ideas into categories and provide a short (1-2 sentences) description to clarify each idea. List any ideas you got rid of by unanimous voting.

**More detail on existing data**

* More detail fed judges
* Look in more detail in MI data
  + Crimes, judges
* Rate of arrests by crime

**Machine Learning**

* Build ML model to predict how cases will be decided
* Bias in judicial system over time (ML, time series)

**Statistical Analysis or Analysis Relating to Demographics:**

* Setting up foundation of analytical steps for all JUSTFAIR projects
* Small town policing analysis
* lawyers; public vs private, etc
* Corr. between win rate and lawyer pay

**New Data Analysis**

* JUSTFAIR for other states
* Financial data analysis relating to modern slavery/human trafficing

**Other**

* Bringing social justice and data science into high schools

### **STEP 4: Apply Selection Criteria**

Apply the selection criteria to the above list and come up with 2-3 of the best ideas for future capstone projects. Make sure you show how these ideas best meet the criteria and what seemed to be the major deciding factors.

**Bringing social justice and data science into high schools**

* This idea was presented to us by our sponsor Jude Higdon from QSIDE.
* This project is something that can be done within the timespan of a semester for a group of undergraduate data science students. A good start would be getting highschool in the areas around MSU involved. Connecting with the school/board to start talking about how and to implement during the semester sounds reasonable. This project idea is absolutely within the realm of the QSIDE Institute’s mission statement based and an idea presented by our sponsor. QSIDE's main mission is social justice for all. There would not be complicated data to obtain. Social justice information comes in many forms, not just Michigan's court data. We can look and find information that is easily available.

**Continue with circuit court scraping / FOIA**

* Continuing with the circuit circuit court scraping/FOIA is ongoing and needs to still be worked on. Future data scientists can pick up where we left off and try to finish the work, but if not, they too can pass it on. Since there is no timeline for this idea, it can be worked on throughout a student's semester. This project is certainly on par with the mission of QSIDE. Web scraping/filing a FOIA is something that is necessary to get data so we can look for injustice. The data/information for this to be completed is already given from our work on this semester's project. Help with the web scraping can be found through the sponsor and professor. Also, help with the FOIA can easily be found online and there are many websites to explain what is needed and where to send.

**Small town policing analysis**

* This idea was presented to us by our sponsor Jude Higdon from QSIDE.
* This project could feasibly be started within the timespan of the semester and would most likely continue after that. This project would start with getting connected to the MSU police force and other local law enforcement agencies. The agencies would need to agree to work with the team in order for this project to work. The data science team would then analyze data and provide a data analysis tool kit for the police force so they could easily analyze their own data in the future. This is definitely in the realm of QSIDE’s mission which is to bring different expertise together to explore social injustice.

### **STEP 5: Project Descriptions**

[Obtaining Michigan Circuit Court Data through FOIA Requests and Web Scraping](https://docs.google.com/document/d/10qUnhY4vvjlhAjLkyPT7LnvqYALJHUG_o8PNZjlwFFk/edit?usp=sharing)

[Small Town Policing Analysis](https://docs.google.com/document/d/1sdvLZEeDs0oMf9Ez0rtFQ_gddphaubRxG0zqLuA2poE/edit)