1n help us build, clean and analyze large datasetsProgramming, preferably in python (required). 2) Knowledge of specific libraries and tools for web data extraction (required). 3) Interest or familiarity with any GIS tools (preferred).

2Candidates should have machine learning skills and extensive programming knowledge. Experience using spatial imagery/satellite data is a plus. Programming in R or Python preferred, but other languages will be considered.

3Good familiarity with spreadsheet design and data management. • Basic statistical and programming skills (e.g. STATA or R). • Data web-scraping skills not required, but would be useful. •

4Ideal candidates have some experience with or a high level of interest in data science, bioarchaeology, and R-programming language. Working knowledge to Microsoft Excel and excellent attention to detail are required. Coursework in anatomy, physiology, and/or biological anthropology/bioarchaeology (such as 127A/B, 103) is appreci

This project will require advanced programming in Python. Some computer science &amp; computational background will be helpful. Working knowledge of git is essential (making branches, merging conflicts, submitting pull requests on GitHub). In order to qualify for the program, you will have to show proof of existing high quality code published online (e.g., GitHub PRs, an online code repository, a patch to a mailing list, your own project, etc.) We require 9--12 hours per week. Please do not apply if your schedule is already stretched.

economists and archaeologists are working together to build an atlas of past civilizations. We are compiling information from thousands of archaeological sites into a single database

, which allows us to study why some societies flourished while others did not. The approach is to apply machine learning tools of natural language recognition to machine-read thousands of archaeological journal articles and obtain the information that is needed.  
  
Day-to-day supervisor for this project: Mehmet Seflek, Graduate Student  
  
Qualifications: This is a data development position. Our diverse team of undergraduate research assistants includes students from various social science disciplines working under the guidance of economics graduate students and faculty. The main task consists of investigating sources on archaeological sites using methods ranging from qualitative text analysis all the way to natural language processing using machine learning techniques. Students learn about machine learning as well as the archaeology and history of societies from across the globe, expanding into a wide set of social scientific skills under close supervision of graduate students, and working in a diverse team of young researchers. economists and archaeologists are working together to build an atlas of past civilizations. We are compiling information from thousands of archaeological sites into a single database, which allows us to study why some societies flourished while others did not. The approach is to apply machine learning tools of natural language recognition to machine-read thousands of archaeological journal articles and obtain the information that is needed.

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3 open

Clean and analyze data  
- Replicate results of existing studies on financial inclusion using available code and data  
- Review literature on financial inclusion and cash transfer programs  
- Create survey questions, assist in the preparation of grant proposals   
  
Day-to-day supervisor for this project: Sean Higgins, Post-Doc  
  
Qualifications: - Data analysis using Stata, R, or Python - Strong written and oral communication skills - Desire to pursue graduate school in economics, public policy, or data science a plus   
  
Weekly Hours: 9-12 hrs

Related website: <http://www.paulgertler.com/>  
Related website: <https://www.seankhiggins.com/>

 CS coders: Outside-the-box, independent thinkers/tinkerers with significant computer science (CS) and/or coding skills to collaborate in web-crawling/scraping charters’ sites, performing text analysis and machine learning (natural language processing, dictionary methods, and topic models), and statistical regression.  
  
Day-to-day supervisor for this project: Jaren Haber, Ph.D. candidate  
  
Qualifications: 1) Manual coders: Detail-oriented, responsible, diligent folks who work well with others. No coding or research experience required for this data collection work. 2) CS coders: Significant to advanced experience with Python is a must. I am specifically looking for experience with implementing GIS (geographic information systems) coding in GeoPandas (or similar); running machine learning algorithms with TensorFlow (or similar); and/or experience web-crawling/scraping from the Internet Archive. Also desirable is experience with text analysis in Python (especially word embeddings and advanced custom dictionary analysis), working knowledge of Selenium and/or the scrapy framework, and background in statistical analysis. Other important qualities: Independent initiative, collaborative spirit, and timeliness in completing task

 develop code in order to collect and clean data for a variety of research projects. Apprentices will apply their programming skills to scrape product data from publicly available websites and to turn messy unstructured data sets into shiny clean data sets available for reproducible research.   
  
Participants will scrape data on a number of markets and phenomena. They will also develop code to analyze the discourse surrounding these markets as found in electronic forums visited by market participants and articles published in the mainstream and specialized press. Students will work with machine learning packages for text analysis to help analyze the millions of observations collected via our web scrapers.   
  
You can find more about our research projects here: https://oskilab.github.io.   
  
Cyrus Dioun will be the day-to-day contacts to field questions, trouble-shoot problems and address everyday issues.   
  
Undergraduates that are proficient in programming languages and statistics will help us collect, clean, and analyze large data sets.  
  
Qualifications: Advanced coding skills. Proficiency with machine learning, SQL, and/or distributed computing.

5 Manual coders: Detail-oriented, responsible, diligent folks who work well with others. No coding or research experience required for this data collection work. 2) CS coders: Significant to advanced experience with Python is a must. I am specifically looking for experience with implementing GIS (geographic information systems) coding in GeoPandas (or similar); running machine learning algorithms with TensorFlow (or similar); and/or experience web-crawling/scraping from the Internet Archive. Also desirable is experience with text analysis in Python (especially word embeddings and advanced custom dictionary analysis), working knowledge of Selenium and/or the scrapy framework, and background in statistical analysis. Other important qualities: Independent initiative, collaborative spirit, and timeliness in completing tas Manual coders: Detail-oriented, responsible, diligent folks who work well with others. No coding or research experience required for this data collection work. 2) CS coders: Significant to advanced experience with Python is a must. I am specifically looking for experience with implementing GIS (geographic information systems) coding in GeoPandas (or similar); running machine learning algorithms with TensorFlow (or similar); and/or experience web-crawling/scraping from the Internet Archive. Also desirable is experience with text analysis in Python (especially word embeddings and advanced custom dictionary analysis), working knowledge of Selenium and/or the scrapy framework, and background in statistical analysis. Other important qualities: Independent initiative, collaborative spirit, and timeliness in completing tas Manual coders: Detail-oriented, responsible, diligent folks who work well with others. No coding or research experience required for this data collection work. 2) CS coders: Significant to advanced experience with Python is a must. I am specifically looking for experience with implementing GIS (geographic information systems) coding in GeoPandas (or similar); running machine learning algorithms with TensorFlow (or similar); and/or experience web-crawling/scraping from the Internet Archive. Also desirable is experience with text analysis in Python (especially word embeddings and advanced custom dictionary analysis), working knowledge of Selenium and/or the scrapy framework, and background in statistical analysis. Other important qualities: Independent initiative, collaborative spirit, and timeliness in completing tas Manual coders: Detail-oriented, responsible, diligent folks who work well with others. No coding or research experience required for this data collection work. 2) CS coders: Significant to advanced experience with Python is a must. I am specifically looking for experience with implementing GIS (geographic information systems) coding in GeoPandas (or similar); running machine learning algorithms with TensorFlow (or similar); and/or experience web-crawling/scraping from the Internet Archive. Also desirable is experience with text analysis in Python (especially word embeddings and advanced custom dictionary analysis), working knowledge of Selenium and/or the scrapy framework, and background in statistical analysis. Other important qualities: Independent initiative, collaborative spirit, and timeliness in completing tas

6who can help us clean, build, analyze and interpret large datasets of geographic information with regards to hurricane prediction and its impacts. We will be using linux, stata, python, ArcGIS/QGIS and related software programs in our analysis.   
  
Students with experience in data analysis / economics / environmental modeling are encouraged to apply. Expertise in analyzing data using python, Stata and Linux command line is preferred.

involved with creating datasets from unstructured data, structuring and cleaning these data using python and analyzing them using STATA. You will perform analyses and jointly work with me towards understanding the impact of better predictions on economic outcomes.  
  
Qualifications: The following skills will be needed and familiarity with them is preferred: a) regression analysis using STATA (required) b) python programming (desirable) c) typesetting using Latex (desirable) d) familiarity with linux server and command line tools (required) In addition, any interest in and familiarity with hurricane prediction and/or other GIS platforms will

7 We are interested in understanding the production of scientific articles in the field of remote sensing and earth and planetary sciences. An an URAP you will analyze data on scientific publications, including the content analysis of the text of the papers, the authors, the universities and creating maps of collaborations over time. Data will be collected and analyzed using a combination of Stata and Python  
  
Qualifications: URAP will need to be familiar with regression analysis and summary statistics using STATA. Some knowledge of python / command line data manipulation is also desired.

8 Preparing research materials, data entry, coding and analyzing data, and presenting results.  
  
Day-to-day supervisor for this project: Kirsten Schowalter, Graduate Student  
  
Qualifications: We are looking for 1-2 highly motivated and conscientious students who are eager to learn about behavior and cultural norms. It is important the student be organized, punctual, and give meticulous attention to detail. Please highlight any experience with R, Python, or Excel in your application.

9lifications: Strong coding experience (Matlab, Python, R, etc.) is required as well as the ability to work in collaborative teams.

10 Strong candidates will have experience in social scientific / educational research OR familiarity with some part of data science (computer science, statistics, or applications in all sorts of domains). Concurrent or previous enrollment in Data 8 and other courses in the Data Science Education Program is strongly encouraged but not required. Students with particular proficiencies are highly valued: familiarity with either qualitative or quantitative information-gathering approaches about student experience (asking questions, doing surveys), as well as cutting-edge data science tools for data exploration and visualization. For diversity and inclusion, ethnographic or other humanistic or social science research background, exposure to debates around inclusion, identity, and equity (through coursework, work experience, or extracurricular activities). Students applying for this URAP must explain 1) which aspects of the project(s) particularly engage them, 2) what skills they bring to the project(s), 3) how many hours per week they can commit

10   
Machine learning, data analysis, visualization, data base management, etc.  
  
Day-to-day supervisor for this project: Anthony Suen, Staff Researcher  
  
Qualifications: Programming experience in CS61A or Data 8 preferred.

11Data science can have a tremendous impact on social issues. This is a great opportunity for students who want to put their skills to use in a socially impact way.

12  
The student will learn applications of machine learning, manipulation of large satellite imagery data sets, and volcanology.  
  
We are seeking a student to use machine learning techniques to search for signatures of submarine volcanic eruptions.  
  
Collect satellites images; construct machine learning classifier for documented eruptions; apply algorithm to larger data set

some scripting knowledge; python or matlab; experience with machine learning helpful but not essential

eco

1The students must be conscientious and able to organize and document their work, based on the specific guidance provided by the GSR and professor. Position 1) The student should have good English reading comprehension ability. Some interest in economics, welfare and/or sustainability will be helpful. Position 2) The student is required to be able to navigate websites with the focus on obtaining data. Some basic Excel is desired, but otherwise will be taught. Database, data scraping, website or coding are desired but not necessary.

2Desirable: computer languages such as Python, Java, etc. Desirable: familiarity with STATA (statistical package) and Excel. The project will be at the intersection of public finance and macroeconomics and will involve data work and statistical analyses.

13 building the equivalent of pandas on Python and the tidyverse on R for the julia programming language. The work covers things like DataFrame types, query languages, file IO, distributed query execution, database connections etc

14The emphasis of this position will be on exposing the apprentice to the experimental research process through hands on experience, and developing skills and knowledge of techniques that may be used in future academic and research endeavors. Successful research apprentices complete their assignments in a timely manner, maintain open communication with other members of the research group and with the research coordinator, ask questions when they need help or guidance, and actively ensure (through communicating with the research coordinator) that they are getting the experience they want from the URAP program.

Major is preferably computer science, statistics or any other science connected to large scale data analysis. - Requires introductory linear algebra (e.g., Math 54) and introductory probabilities and statistics (e.g., Stat 20). Previous experience and/or coursework in machine learning is strongly preferred. - We have a strong preference for sophomores or juniors who may participate for at least one year. - GPA of at least 3.5 - Required: Python, Linux - Desirable: Machine Learning, Intro to Artificial Intelligence

13nvestigating the global network of unseen programs that gather and combine every scrap of personal data they can, without clear public knowledge. The “Dark Data” project seeks to illuminate this complex ecosystem through various experiments that attempt to measure and perturb unseen data pools by selectively adding or retrieving information, and to examine the effects of these hidden data flows on people’s employment, economic, and social activities

 Proficiency in Python and Linux are preferred. Experience with API programming, machine learning, and/or classroom teaching are also pluses.

14  All new applicants are required to be seniors. - Major is preferably computer science, statistics or any other science connected to large scale data analysis. - The applicants are required to have attended the basic machine learning course. It is desirable but not essential to have visited one advanced course in machine learning. - For the first role, the undergraduate needs to apply with an idea of a field study she/he wants to implement. - The second role will be filled by only one applicant who is required to have experience in search, databases, machine learning, and frontend development. - Applicants without a clear reference in their application to this project (Multimedia Big Data Field Studies) or not commenting on the required qualification will not be considered. - GPA of at least 3.5 - Required: Python, Linux, Machine Learning, Intro to Artificial Intelligence they must develop and execute a plan for recording data. This process is often very time-consuming; recruitment and recording setups can be complex, and rules about experiments with human subjects must be followed. However, in the age of big data, there are some new alternatives. People are increasingly sharing all kinds of data about the world. They do this for their own reasons, not to support field studies-but it presents a great opportunity for scientists. The Yahoo Flickr Creative Commons 100 Million (YFCC100M) dataset comprises 99.2 million images and nearly 800,000 videos from Flickr, all shared under Creative Commons licenses. Even larger datasets are expected in the future. To enable scientists to leverage this data for field studies, we are working on a new framework that extracts the required information from this huge dataset, in a format usable by researchers who are not experts in big data retrieval and processing. There is a gap between the separate aspects of what multimedia researchers have shown to be possible with consumer-produced big data and the follow-through of creating a comprehensive field study framework that supports scientists across other disciplines.  the undergraduate has to apply with a specific and convincing idea of a field study with the dataset and will implement it under the guidance of the team. The outcome is the experience with improved practical experiance with machine learning on a larger scale and the contact to another research disciplin as chosen by the student.  
  
The second role is more directly connected to the framework and the development of a novel frontend for intuitive data search and data cleaning. The undergraduate will start with an existing Solr search backend and make it accessible for Multimedia Big Data Field Studies by an easy to use webpage. Experience will be gained in accessing a Solr search backend and working with the YFCC100M.

14Program synthesis aims to automatically generate programs from diverse set of inputs. It can be automatic translation between different programming languages, automatic formal proofs, generating programs from natural language descriptions, drawings, or user interactions, it can even be automatic generating HTML and other languages like SQL. During this project you will help building deep-learning networks for program synthesis.  
  
Qualifications: solid background in math (probabilities) and machine learning, proficient in programming in Python and C++, ideally with background and experience in deep learning

16Deep-learning has revolutionized AI, and achieves human-level accuracies in many tasks such as image recognition. Development on the optimization techniques and the availability of large amount of data make training a large architecture possible, which also opens up many intriguing problems to answer. In this project, we are interested in these deep learning problems in three general directions: (1) the mathematical property of deep learning models. For example, one important phenomenon discovered recently is that an attacker can manipulate very slightly the inputs to a deep learning classifier to make the prediction entirely wrong. We can study the robustness issue of deep learning systems against such adversarial manipulations. (2) applying deep learning techniques to novel application domains. For example, we will study program synthesis problems and security applications using deep learning. (3) The infrastructure to support large-scale deep learning. For example, we will study several existing efforts such as TensorFlow to design and develop new frameworks to make it easier for developers to build deep learning systems, architecture and applications. We are also open to other important and not well-understood deep learning related topics.  
  
Moreover, machine learning techniques can be valuable in addressing security problems, e.g., identifying anomalous changes in behavior, clustering and classifying different behaviors/samples. We study how to apply machine learning techniques for a number of security applications including malware analysis and defense, social-network security analysis and defense.  
  
Qualifications: solid background in math (probabilities) and machine learning, proficient in programming in Python and C++

15experience in system building (Python, JavaScript, web development, distributed systems) and/or solid background in math (probability) and machine learning, proficient in programming in Python and C++, ideally with background and experience in deep learning

17Desire to learn data analysis techniques and ability to use MATLAB, Python, or R is a must, experience with data analysis is a plus. Experience with MongoDB and/or SQL, as well as experience with solar power systems also a plus. Enthusiasm is a must. Students applying for this URAP must explain 1) which aspects of the project(s) particularly engage them, 2) what skills they bring to the project(s), 3) how many hours per week they can commit.

18Strong quantitative skills required; Math through advanced calculus and differential equations required, Experience working with at least one mathematicall software package such as R or Python or Matlab. Interest in ecology, desired

19  
Qualifications: Qualifications for all SWITCH projects: Applicants must be highly-motivated with enthusiasm for renewable energy and data management. Preference will be given to applicants with experience with relational databases (particularly PostgreSQL), web-scraping, data munging, and data visualization. Some experience with GIS, AMPL, Python, data analysis tools. In addition, for the GUI development, we’re looking for a colleague who is well versed in JS (javascript).  
  
Weekly Hours: to be negotiated

Stats13  Implementation will happen in C/C++ with bindings to R. Familiarity with C/C++, and basic knowledge of R is required. An understanding of machine learning techniques, such as Random Forest, Gradient Boosting, and Neural Networks, is appreciated but not required.

14using publicly-available data, URAP participants will construct a map or network of the flows of money between donors, foundations, political organizations, and campaigns in American politics. Second, URAP participants will help conduct surveys of elected officials, donors, and political organizations.

14tudents with more technical backgrounds may assist with the development of the programs and algorithms needed to analyze the text and to optimize the data structure. This will take the form of coding, largely in python and R, for large scale text analysis and natural language processing. In this case, appropriate levels of technical skills are prerequisites.  
  
Students will be responsible for coding and cleaning large datasets pertaining to the European Union's oversight. Subsequent tasks may deal with data analysis using the sets prepared by the students. Additionally, students may be asked to read government documents and either A.

15Experience with Excel is required. Background in statistics, especially with statistical programs, is desirable, though not essential. After the coding phase, the complexity of tasks given to students will depend on their technical training. Students with interests in European history/government and/or the European Union are also encouraged to apply. For students interested in the technical side of work, students should be comfortable in python and R. Some degree of experience/interest with text analysis or natural language processing would be beneficial, but if students are willing to learn techniques in this area not necessarily required.

16 Apprentices will gain experience in creating and managing a large dataset and have the opportunity to improve skills needed for historical, demographic, and social science research.vrevious experience working with spreadsheet databases (e.g., Google Sheets) is required. Experience with OCR software (e.g., Abbyy Finereader, Tabula, tesseract) and/or R programming desirable but not essential; Social science majors with an interest in political economy or American history will find this project compelling because of the nature of the data

17(1) sing administrative data, public opinion surveys, and spatial data, the undergraduate research assistant will assist coauthors in cleaning, aggregating, and analyzing large datasets, as well as displaying the data in map form. This apprenticeship is designed to expose undergraduates to techniques in large-scale data management, advanced quantitative analysis, and the manipulation of map data  
  
Qualifications: Qualifications: Research apprentices MUST be proficient in either R or STATA. Applicants should also be proficient in ArcGIS, or a similar mapping platform with R compatibility (e.g. QGIS). Foreign language skills (Portuguese, Malay, or Hindi) are a plus.

18In this project, we will develop and implement a new algorithm to estimate the treatment effect of a single unit (e.g. a patient). We will start with an idea based on the machine learning algorithm, Random Forest. The goal is to implement and publish a version of our algorithm suited for big data.   
  
Regular meetings about the project will take place between students, Professor Sekhon (political science and statistics), and Sören Künzel (Ph.D. candidate in statistics). These meetings will give students an opportunity to learn about causal inference, machine learning, statistical inference for big data, and parallel computing.   
  
Day-to-day supervisor for this project: Sören Künzel, Ph.D. candidate  
  
Qualifications: Implementation will happen in C/C++ with bindings to R. Familiarity with C/C++, and basic knowledge of R is required. An understanding of machine learning techniques, such as Random Forest, Gradient Boosting, and Neural Networks, is appreciated but not required.

20RA primary responsibilities will include data collection and assisting in data analysis. They are also expected to attend and participate in lab meetings.  
Behavioral data collection will consist of administering online sessions for RPP participants, as well as in-person sessions in our lab. Code for the experiment has been written, but edits to the experimental code may need to be made during piloting. The experimental code is written in javascript and python and runs on a website hosted on Amazon’s web services.   
Data analysis will consist of downloading data from web servers, organizing and cleaning data, and doing basic descriptive statistics and plotting. The RA may also help in fitting computational modes or doing other complex statistical analyses. Analyses will be done in python (and sometimes R).

Day-to-day supervisor for this project: Christopher Gagne, Graduate Student  
  
Qualifications: RA must have some programming ability (preferably in python). Experience running participants in psychology experiments is also useful.

21 research assistants will be responsible for coding the experiment. They will then be responsible for running the experiment online, through the several steps required: advertising, running the task, monitoring the software and data collection, organizing collected data and analyzing data. They will receive training and supervision in these tasks.   
  
Furthermore, research assistants will be expected to familiarize themselves with the goals and the contents of the project. They should be able to clearly explain the purpose and predictions of the experiment. The mentor will provide guidance in reading some of the relevant literature, to put the specific project in a broader context.   
  
Research assistants will be required to meet regularly with their mentor and to keep track of their progress in the project.   
  
  
Qualifications: To work on this project, we will use the Amazon Mechanical Turk platform (https://www.mturk.com/mturk/), with support from Psiturk (https://psiturk.org/). For this project, RAs will need to use code in javascript, html, python, and manipulate SQL databases. Mentors will provide support to learn these skills, but some coding skills are strongly recommended and preferred.

22 SIX REQUIREMENTS (Please talk about these in your application): 1) Strong interest in language acquisition and/or cognitive development. 2) Have taken coursework in at least two of the following: Linguistics, Cognitive Science, Computer Science, Psychology, Philosophy, or Statistics. 3) Strong attention to detail. 4) Strong organizational skills. 5) Strong communication skills, and a native level of fluency in spoken and written English. 6) Have visited our lab website and read about our research before applying. TIME COMMITMENT: 1) Nine hours of work per week, and a flexible scheduled (since you will need to work a mix of weekday and weekend hours each week). 2) Two semesters of work in the lab. In your application, please specify whether you are able to continue working this fall and/or the following spring or summer. ADDITIONAL PREFERRED SKILLS (Not Required, but if you have them, please talk about these skills in your application): 1) Computer Programming experience (Python, R, Javascript, HTML, etc.). 2) Experience with statistical data analysis. 3) Experience working with children. 4) Experience working with eye tracking technology. 5) Experience doing behavioral coding. 6) Experience with Excel and PowerPoint . 7) Experience working with Qualtrics and/or Amazon's Mechanical Turk.

SEVEN REQUIRED SKILLS: 1) A strong computational background. 2) Extensive programming skills in Python. 3) Experience with natural language processing and/or machine learning. 4) A strong interest in language and cognition. 5) Strong attention to detail. 6) A native understanding of English and familiarity with syntax and grammatical morphology (e.g., verb tense). 7) Comfort with Github and strong code commenting. TWO SEMESTERS REQUIRED: Because we try to engage student researchers in a comprehensive research experience, training often takes up the better part of the semester. For this reason, we are interested in hiring students who are able to commit to more than one semester. In your application, please also specify whether you are able to continue working this fall and/or the following spring or summer. ADDITIONAL PREFERRED SKILLS (NOT REQUIRED): 1) A Linguistics background. 2) Experience with corpus analysis. 3) Experience with MySQL (which the student will otherwise be expected to learn in the course of this research).

8This study is employing a range of research methods—participant observation, structured observation, in-depth interviews, informal group discussions, and the review of program reports and documents. The Nigerian and Nigerien research assistants are participating in the daily life of the community, living with families with married adolescent girls, and writing fieldnotes of their observations every evening. This participant-observation is meant to bring together what people say (the content of interviews) and what they do (daily observations in the form of fieldnotes).   
  
  
The undergraduate research apprentices will be trained to analyze qualitative data. They will learn to code and analyze the researchers' interviews and fieldnotes, write analytical memos, and turn the insights gathered from this process into an article.  
  
Qualifications: Required: Qualitative research coursework or experience required. In addition, for those with strong French fluency, we will also have opportunities analyzing interviews and observations from our research in Niger.

14A background in environmental science, computer science, mathematics, modeling, population biology, environmental engineering, or epidemiology are preferred, and/or a technical skillset including statistical or spatial analysis, GIS, math, programming in any language. Effective written and verbal communication are essential. Advanced qualifications of the candidate would be a plus, including experience with environmental modeling, familiarity with R, programming, experience with theoretical ecology, remote sensing, GIS or differential equation

15Training Opportunity  
-Collecting, Annotating, and Analyzing Big Data in Medicine.  
-Applying Machine Learning, Statistical Methods, and Image Processing to tackle clinically important problems.  
-Communicating research problems &amp; results to a variety of audiences including clinicians, engineers, entrepreneurs, and general public.  
-Writing clinical research papers &amp; abstracts.   
  
Qualifications: Requirement: - Working Knowledge of a programming language (Python or R preferred, but others acceptable). At least one college-level course in computer programming. - Working Knowledge of statistics (mean, variance, linear regression, t-test, chi-square, hypothesis testing). At least one college level coursework in statistics. - Working Knowledge of Microsoft Excel Recommended: - Working knowledge of basic machine learning (cost function, gradient descent / optimizer, back-propagation, cross-validation, bias-variance tradeoff, error analysis). This is not an initial requirement, but it will be used very often, so we expect you to read or take courses to familiarize yourself by end of first semester. CS 189/289A or equivalent. - Coursework in Multivariable Calculus, Linear Algebra, and some form of scientific computing. - Working knowledge of Tensorflow/Keras, Pytorch, or Caffe. Optional: - Working knowledge of AWS - Working knowledge of Version Control (such as Github). - Working knowledge of SQL, Microsoft Access - Working knowledge of Mendeley (or equivalent citation manager) - Coursework in linear programming and numerical analysis