2017 DSSG Fellowship Application Part 2

Data Science for Social Good
University Of Chicago
Application Deadline: January 31st, 2017

This form will not save if you exit this window. Please check the box below to indicate that you understand this: *

☐ I understand!

Legal Name *

[   ]   [   ]
First   Last

Preferred Name

[   ]

Address *

[   ]
Street Address

[   ]
Address Line 2

[   ]   [   ]
City   State / Province / Region

[   ]   United States   ⬍
Postal / Zip Code   Country

Phone *

[   ]

Email *

[   ]

Citizenship and US Visa Status *

[   ]

School Information

I am a: *

◉ Undergrad   ○ Masters student

○ PhD Student   ○ Postdoc

○ Other

    [   ]

I identify my gender as: *

○ Female   ○ Male

○ Trans*

○ Other

[   ]

University Name *

[   ]

Major/department *

[   ]

Expected Graduation Date (or date when you last graduated) *

[ ] / [ ] / [   ] 📅
MM   DD   YYYY

Name of Advisor, if applicable

[   ] [   ]

First   Last

Upload your unofficial transcripts from your current degree program (or from the most recent degree you have received). *

[Choose File] No file chosen

Experience, Interests, and Expertise

We're looking for people with diverse and multidisciplinary expertise. You don't have to be an expert in all of the areas below but we want to know about your strengths and weaknesses so we can get the right mix of fellows.

We want people who are quantitative, analytical, and care about the world.

We typically get fellows from Computer Science, Statistics, Math/Applied Math, Physical Sciences, Social Sciences, Economics, Public Health, and Public Policy programs, but we're open to other fields as well.

Rank your proficiency in the following areas: *

	Most Proficient 1	2	3	4	5	6	7	8	Least Proficient 9
Computer Programming	○	○	○	○	○	○	○	○	○
Computer Science (Algorithms)	○	○	○	○	○	○	○	○	○
Statistics	○	○	○	○	○	○	○	○	○
Machine Learning	○	○	○	○	○	○	○	○	○
Social Science (Economics, Sociology, etc.)	○	○	○	○	○	○	○	○	○

	Most Proficient 1	2	3	4	5	6	7	8	Least Proficient 9
Experience working on real-world problems using data	○	○	○	○	○	○	○	○	○
Experimental Methods (RCTs, A/B testing, etc.)	○	○	○	○	○	○	○	○	○
Data Skills (SQL, Data ETL)	○	○	○	○	○	○	○	○	○
Visualization	○	○	○	○	○	○	○	○	○

Programming Languages: Rate your proficiency in these languages.

Most teams use Python during the summer so having (at least) basic skills in python is necessary for the fellowship. *

	None	Can do basic scripting	Have written moderately complex code (web scrapers for example)	Have written complex applications or modules
Python	○ 1	○ 2	○ 3	○ 4
Java	○ 1	○ 2	○ 3	○ 4
C/C++/C#	○ 1	○ 2	○ 3	○ 4
Other	○ 1	○ 2	○ 3	○ 4

Tell us more about your coding experience. What projects have you worked on, what was your role, and what tools and languages did you use?

You don't need to be an expert coder to be part of DSSG, but you need some coding experience. We want to know more about your skills so we can create the right teams for each project. *

Maximum Allowed: **250** words.   *Currently Used:* **0** *words.*

Data Analysis Tools: Rate your proficiency in data analysis tools/languages *

	None	Used it in a course	Use it for fun and work regularly	Have written new modules for it

R	◯ 1	◯ 2	◯ 3	◯ 4
SQL	◯ 1	◯ 2	◯ 3	◯ 4
Matlab	◯ 1	◯ 2	◯ 3	◯ 4
SAS	◯ 1	◯ 2	◯ 3	◯ 4
SPSS	◯ 1	◯ 2	◯ 3	◯ 4
Stata	◯ 1	◯ 2	◯ 3	◯ 4
Julia	◯ 1	◯ 2	◯ 3	◯ 4
Other	◯ 1	◯ 2	◯ 3	◯ 4

Tell us more about projects you have done with data analysis.
What tools did you use?
What algorithms/methods?
What format was the data in?
Did it come from multiple sources?
How did you store it?
Where did the output of the analysis go and how was it used (thesis,
report, use of the analysis)? *

Maximum Allowed: **250** words.   *Currently Used:* **0** *words.*

Statistics & Machine Learning Methods: Rate your proficiency in using these types of models *

	Huh?	Used them in a class	Used in my own work/research	Implemented the model and customized it
Regression Models	◯ 1	◯ 2	◯ 3	◯ 4
Decision Trees	◯ 1	◯ 2	◯ 3	◯ 4
SVMs	◯ 1	◯ 2	◯ 3	◯ 4
Random Forests	◯ 1	◯ 2	◯ 3	◯ 4
Neural Networks / Deep Learning	◯ 1	◯ 2	◯ 3	◯ 4

	Huh?	Used them in a class	Used in my own work/research	Implemented the model and customized it
Time Series Models	1	2	3	4
Unsupervised models	1	2	3	4
Semi-Supervised models	1	2	3	4
Graphical models	1	2	3	4
Other	1	2	3	4

Tell us more about your experience with modeling and machine learning algorithms and methods.

Which algorithms and methods have you used?
Which ones are you comfortable with?

Tell us about a project you've done using machine learning
– What was the goal of the project?
– What did you do?
– How were the results used?
– Did anyone else have to use your work? *

Maximum Allowed: **250** words.   *Currently Used:* **0** *words.*

Quantitative Social Science Methods: Rate your proficiency in: *

	Huh?	Used them in a class	Used in my own work/research	Implemented the model and customized it
Causal inference	1	2	3	4
Matching (e.g., Propensity Score Matching)	1	2	3	4
Instrumental Variables	1	2	3	4
Regression Discontinuity	1	2	3	4
Natural Experiments	1	2	3	4
Other	1	2	3	4

Tell us more about your experience with quantitative social science methods. What methods have you used? What was the goal of the work you were doing? How were the results used? *

Maximum Allowed: **250** words.   *Currently Used:* **0** *words.*

Types of Data: Rate your experience working with the following types of data *

	No experience	Used in a class	Used in my own work/research	I live and breathe this data type
Data in Text Files	1	2	3	4
Data in Relational Databases	1	2	3	4
Text Data (NLP)	1	2	3	4
Network/Graph Data	1	2	3	4
Multimedia Data (Video or Audio)	1	2	3	4
Data from Sensors	1	2	3	4
Data > 1TB	1	2	3	4
Geospatial	1	2	3	4
Other	1	2	3	4

Tell us more about your experience using data. What type of data are you most experienced and comfortable with?

Text files? databases? natural language text data? graphs/networks? images? multimedia? *

Maximum Allowed: **200** characters.   *Currently Used:* **0** *characters.*

Tell us about data-related projects you've worked on recently.

For example:
What was the goal of the project?
What methods and tools did you use?
What did you do?
Were these projects that you worked on independently, or as part of a team?
What was your role if it was done as part of a team?
What was the outcome and impact?

If any materials about the projects are available online, please include links here (papers, web pages, Github repos, blog posts, etc.). *

Maximum Allowed: **500** words.   *Currently Used:* **0** *words.*

Link to your GitHub Account, if you have one (or a code sample that is online) *

Experienced in working on problems related to: *

☐ Education   ☐ Health   ☐ Energy

☐ Environment   ☐ Transportation ☐ Poverty

☐ Housing/Land Use   ☐ Public Safety   ☐ International Development

☐ Other

Interested in working on problems related to: *

☐ Education   ☐ Health   ☐ Energy

☐ Environment   ☐ Transportation ☐ Poverty

☐ Housing/Land Use   ☐ Public Safety   ☐ International Development

☐ Other

What is it about 'social good' work that you find compelling? Tell us about your past experiences working in (or with) the public sector (this

can mean work or projects with governments and nonprofits, volunteer work, or for-profit work with a social mission).

What accomplishment are you most proud of in this area? In two sentences, tell us what you found a) the most rewarding and b) the most frustrating about these experiences. *

Maximum Allowed: **500** words.   *Currently Used:* **0** *words.*

DSSG is a team-centric environment. Tell us the three best qualities that you bring to a team (your experiences can be from school or from a job).

Additionally, tell us one element of teamwork that you find frustrating, and walk us through the process of how to like to work through disagreements.

How do you organize your work when working with a team? What collaboration tools did you use to work with a team? (Calendars, Email, Slack, GitHub, Trello, etc) *

Tell us about your future plans (post-DSSG and post-summer as well as longer term) and what you want to get out of this summer at DSSG *

Maximum Allowed: **200** words.   *Currently Used:* **0** *words.*

How did you hear about this program? *

Have you applied to UChicago's DSSG in the past? *

○ Yes

○ No

○ Different DSSG program

Anything else you'd like to tell us? If you have applied for DSSG in the past, please tell us what's new since you last applied

Maximum Allowed: **250** words.   *Currently Used:* **0** *words.*

Please attach your resume or CV as an additional Word, PDF, or text document. *

Choose File   No file chosen

Optional Info

We have a limited number of dorm spaces that we can reserve for DSSG fellows. Checking this box does not guarantee you a space, but we will try to reserve space for those that express interest. If you do not check this box you would be expected to source summer housing yourself.

We also have a limited number of spaces for some fellows to continue work after the summer. Checking this box lets us know which fellows are available and interested in staying for the school year post summer.

University Housing

☐ I would like to be considered for a space in University Housing

Post-summer work

☐ I am currently available and interested in a post-summer job opportunity with the Center for Data Science and Public Policy

☐ I would like DSSG to share my info with social-good organizations who are looking for help (Don't worry: we won't sell your info.)