

Faculty Recruitment Program

Funding Opportunity for New Faculty Hires

Every field has data. We use data to discover new knowledge, to interpret the world, to make decisions, and even to predict the future. The recent convergence of big data, cloud computing, and novel machine learning algorithms and statistical methods is causing an explosive interest in data science and its applicability to all fields. This convergence has already enabled the automation of some tasks that better human performance. The novel capabilities we derive from data science will drive our cars, treat disease, and keep us safe. At the same time, such capabilities risk leading to biased, inappropriate, or unintended action. The design of data science solutions requires both excellence in the fundamentals of the field and expertise to develop applications which meet human challenges without creating even greater risk.

The Data Science Institute at Columbia University is a world-leading institution in research and education in the theory and practice of the emerging field of data science. Started in 2012, it is now a university-level institute representing over 250 affiliated faculty from 12 different schools across campus. Data science literally touches every corner of the university.

The Data Science Institute's mission is:

1. Advance the state of the art in data science
2. Transform all fields, professions, and sectors through the application of data science
3. Ensure the responsible use of data for the benefit of society

It is in this context that the Data Science Institute at Columbia University promotes “Data for Good”: using data to address societal challenges and bringing humanistic perspectives *as*—not after—new science and technology is invented.

Program Goal

The Data Science Institute is pleased to announce a new program in support of new faculty hires across Columbia University in the area of data science. In the past five years, the Data Science Institute has already engaged with many departments and schools across the university to recruit and hire new faculty. In general, the Data Science Institute is eager to work with Schools/Departments at any time during the year to help recruit faculty interested in data science.

With this new program, however, we want: (1) to make this recruitment process more systematic, including deeper engagement between the Institute and Schools/Departments; (2) to broaden faculty search to all Departments and Schools across the entire university; (3) to encourage Schools/Departments to recruit faculty in data science; and (4) to provide initial funding to support new data science hires.

The goal of this program is to help Columbia University recruit and hire top junior scholars in their respective disciplines, and specifically those who are advancing and/or applying data science. We are as interested in candidates who bring data science expertise to their discipline as in those who bring their disciplinary expertise to data science. By jointly recruiting top candidates to Columbia, the DSI wishes to foster deeper collaborations with all parts of the university.

Program Target

We are open to engage in the recruiting and hiring of faculty candidates from all fields of study. Both the hiring unit and the candidates should have an explicit interest in advancing or applying data science. The Data Science Institute would be especially excited about candidates who will help fulfill our broadly stated mission above. We intend to support only junior faculty hires.

Recruiting Process

Through this Data Science Faculty Recruiting Program, the Institute will participate in the recruitment process and provide initial funding to support new junior faculty hires interested in data science. There are two key points of engagement in the recruiting and hiring process: the time at which the School/Department is ready to invite data science candidates for an on-campus interview; and the time at which the School/Department is ready to extend an offer to a candidate for a faculty position at Columbia. Of course, the DSI is eager to engage with Schools/Departments during the entire process, even before and after these two points, including scouting out potential candidates, participating during the on-campus visit, and helping convince a candidate who has been extended an offer to come to Columbia University.

Registration: For recruiting, Schools/Departments should follow their normal schedule and process for recruiting and hiring new faculty. The DSI would like first to engage with Schools/Departments as soon as they are ready to extend an invitation to a potential faculty candidate (interested in data science) for an on-campus interview. At this point, we ask the Schools/Departments to *register* with the Institute their intent to recruit candidates in data science by providing: (1) a list of names and research areas of interest of potential candidates who are on their short list for on-campus interviews; (2) access to their application packages; and (3) for each candidate, a brief explanation of how the candidate's research advances the aforementioned goal of this program, including deepening collaborations with the DSI.

The DSI will use registration information to help identify appropriate DSI faculty to engage with registered Schools/Departments in their recruiting efforts. We will work closely with the relevant deans and department heads to coordinate the faculty candidate on-campus interviews to ensure candidates get to meet data science faculty, and vice versa. The registered Schools/Departments are welcome to consult with the Institute on the evaluation of candidates.

Funding with Offer: Final decisions on contributing initial funding to a candidate's offer package as part of the DSI Faculty Recruiting Program will be made in the best interests of both the Institute and the School/Department. Budgets for how Institute funds will be spent will be agreed on before an offer is extended to the faculty candidate.

The Institute and School will identify a mutually agreeable date by which a letter of acceptance will be received from the candidate. If an acceptance letter is not received by that date, the Institute will re-evaluate its funding commitment to that candidate.

Given the limited amount of funding (and bandwidth of DSI faculty), Schools are strongly encouraged to develop a process for determining which candidates would be good to recruit in partnership with the DSI. Departments requesting DSI's engagement for hires in data science through this program should coordinate closely with their Deans. Registration lists submitted by Departments must be submitted with the support and sign-off by their School's Dean.

Scope of Initial Funding Commitments

Data Science Institute: The Data Science Institute's financial commitment is limited to three years. After that, 100% of the costs will be borne by the School and Departments. Note: Institute funds cannot be used for capital expenditures.

- Lab-based faculty. The Data Science Institute is prepared to provide the lesser of up to \$200K/year/3 years or 50% of offer/year/3 years for a successful candidate.
- Non lab-based faculty. The Data Science Institute is prepared to provide the lesser of up to \$100K/year/3 years or 50% of offer/year/3 years for a successful candidate.

Schools: Schools and Departments are responsible for covering the remainder of costs not provided by this funding opportunity.

Registration Material and Deadline

We accept registration materials from a School or Department on a rolling basis from **Tuesday, January 16, 2018 through Thursday, March 1, 2018.**

Submissions early in this window are strongly encouraged.

As part of your registration, please submit the following to: DSI-FacultyRecruit@columbia.edu:

- Cover page (see appendix);
- A short list of faculty candidate names and areas of interest; these candidates should be those for which the School/Department intends to invite for an on-campus interview;
- Access to or copies of the faculty candidates' applications. Please be sure the candidate's c.v. is included in each package. We expect Schools/Departments to obtain permission from candidates to share their applications with the Data Science Institute;
- For each candidate, a 1-2 paragraph explanation of why the candidate would be good for the Data Science Institute and how the candidate's research advances the aforementioned goal of this program, including deepening collaborations with the DSI;
- If applicable, a letter from the School indicating the Dean's support for engagement with the Data Science Institute.



COLUMBIA UNIVERSITY

Data Science Institute

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Primary Point(s) of Contact Department – School Registration																													
First Name					Last Name					UNI					CU Position/Title					Department					School				
Short List of Candidate(s)										Anticipated On-Campus Interviews																			
First Name					Last Name					Email					Conferred Degree(s) and Year					Degree Awarding Institution(s)					Area(s) of Interest Brief				
A																													
B																													
C																													
D																													
E																													
Registration Materials Check List for Candidate(s) Listed Above																													
Candidates' Permission obtained to share application with DSI:										Candidates' application material(s), including CVs										Summary(s) outlining match for the spirit of this program:					Letter(s) of Support from Program/School Dean for Candidate(s) (as needed):				
YES	A	B	C	D	E	A	B	C	D	E	A	B	C	D	E	A	B	C	D	E									
Advanced Planning Candidate Invitation(s) to Interview																													
If the above candidate(s) have already been invited to interview, please advise as to date/time (if known)					A DATE					B DATE					C DATE					D DATE					E DATE				