**Center for Statistical Training and Consulting (CSTAT)**   
**Graduate Student Research Assistantship Application**

Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Semester(s) applying for: \_\_\_\_\_\_\_\_\_\_\_\_\_

Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Email \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Address/Phone: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Date when you plan to graduate: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Degree expected and subject: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Degrees held:

B.S. or B.A., Subject/University/Date \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

M.S. or M.A. Subject/University/Date \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Have you already completed your comprehensive exams? If not, state when you expect to do that: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Preference: ¼ time appointment ½ time appointment  
 Hourly appointment Volunteer

Describe any other concurrent employment you will have during the period you want to work for CSTAT:

Describe any other work experience or qualifications that you have:

Describe why you would like to work at CSTAT:

Please list any research methods and research design courses that you have taken: (Pages/rows can be added. You may also attach a copy of your unofficial transcript if you wish. *There is a separate question below for statistics and computing courses, so do not include them here*.)

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| Course | Grade | Semester taken |
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Please list statistics and computing courses that you have taken: (Pages/rows can be added. You may also attach a copy of your unofficial transcript if you wish.)

|  |  |  |
| --- | --- | --- |
| Course | Grade | Semester taken |
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What are your computational skills? Use the following rating scale:

* 0= little or no experience with the item.
* 1= you are reasonably familiar with the item.
* 2= you have extensive experience with the item.

You may add and rate additional software that is relevant.

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| --- | --- | --- | --- |
| **Software** | **Rating (0, 1, 2)** | **Software** | **Rating (0, 1, 2)** |
| R |  | Mplus |  |
| R markdown |  | Access or other databases |  |
| SAS |  | LaTeX |  |
| SPSS |  | PASS |  |
| STATA |  | WinBUGS/JAGS |  |
| Matlab |  |  |  |
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Please rate both your current level of skill and your level of interest in each of the following statistics topics. If a topic relevant to your skills is missing, please add it to the bottom of the list.

| **Statistical Topics** | **Experience**  0 = little/no experience  1= moderate  experience  2 =extensive experience | **Level of Interest**  1 = Low or none  2= Moderate  3 = High | **Comments** |
| --- | --- | --- | --- |
| Bayesian statistics |  |  |  |
| Categorical data analysis (including log-linear models) |  |  |  |
| Classification or diagnostic accuracy (ROC curves/AUC) |  |  |  |
| Data management |  |  |  |
| Dose-response curves/models |  |  |  |
| Econometrics |  |  |  |
| Evaluation of prediction models |  |  |  |
| Experimental design |  |  |  |
| Longitudinal data analysis |  |  |  |
| Machine learning algorithms (e.g. lasso, random forests, SVM, boosted classifiers) |  |  |  |
| Measurement development & psychometrics |  |  |  |
| Missing data (assessing its impact, imputation & alternatives for handling it) |  |  |  |
| Mixed effects models (multilevel models, random effects models) |  |  |  |
| Models with time dependent outcomes (survival, landmark, dynamic prediction) |  |  |  |
| Network analysis |  |  |  |
| Power analysis and sample size planning |  |  |  |
| Quasi-experimental design & analysis |  |  |  |
| Regression analysis (linear and generalized linear models, variable selection) |  |  |  |
| Social network analysis & dyadic data |  |  |  |
| Spatial or spatio-temporal data analysis |  |  |  |
| Statistical genomics/genetics |  |  |  |
| Structural equation models (SEM) & latent variable models |  |  |  |
| Survey research |  |  |  |
| Systematic reviews and meta analyses |  |  |  |
| Time series analysis |  |  |  |
| Visualizing data |  |  |  |
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Please provide the names, email addresses, and phone numbers of two professional references.

Name (Title) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Phone \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Email \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Name (Title) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Phone \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Email \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

PLEASE NOTE: If you work for CSTAT, we require you to be available on campus to attend required training that may start on the first weekday on or after the start of the appointment period (e.g., 5/16 for Summer, 8/16 for Fall, 1/1 for Spring). You must be available the entire semester. I have read and understand the above.

**Signature: Date:**

Please email this completed form to [cstatinf@msu.edu](mailto:cstatinf@msu.edu).