

**Application for the William and Mary EXTREEM-QED program
Spring 2014**

Return this form, transcript and one-page research proposal to Prof. Junping Shi (Jones Hall 117) in the Department of Mathematics (or email to jxshix@wm.edu) by March 17, 2014.

What is EXTREEMS-QED?

1. The National Science Foundation Expeditions in Training, Research, and Education for Mathematics and Statistics through Quantitative Explorations of Data (EXTREEMS-QED) grant is a program whose goal is “to support efforts to educate the next generation of mathematics and statistics undergraduate students to confront new challenges in computational and data-enabled science and engineering (CDS&E). EXTREEMS-QED projects must enhance the knowledge and skills of most, if not all, the institution’s mathematics and statistics majors through training that incorporates computational tools for analysis of large data sets and for modeling and simulation of complex systems”.

2. Students major in mathematics are eligible for acceptance. Mathematics majors or double majors are encouraged to apply. Math course pre-requisite for EXTREEMS-QED is Math 111, 112, 211, 212, 214 and two other 300-400 level math courses. For specific projects, some other pre-requisites may apply.

3. This work will be supported from the EXTREEMS-QED grant with a stipend of up to \$4,000 for the summer research program. Travel support and summer housing is available as needed. To receive the stipend from NSF-EXTREEMS-QED grant, the student should have the status of US citizen or permanent resident. International students may be supported by Charles Center scholarship or other grants from advisers.

4. The 2014 William & Mary EXTREEMS-QED Summer Program will be eight weeks from May 26 to July 18. Further information is available online at http://www.wm.edu/as/mathematics/undergraduate_research/EXTREEMS-QED/index.php

Admission to the William and Mary EXTREEMS-QED program entails the following commitments on your part.

A. Research in the remainder of the Spring 2014 semester and participation in the Summer 2014 REU. A research report is to be submitted by Sept. 1, 2014.

B. An honors project in your junior/senior year is strongly recommended.

C. Presentation of your results at on-campus or off-campus research conferences (travel supported by the EXTREEMS-QED program).

Application information:

1. Name: _____ W&M e-mail address: _____

2. Expected Graduation Year (circle one): 2014 2015 2016 2017.

3. What major/minor have you declared or intend to declare?

What is (are) your major(s) and overall GPA?

Major: _____ Minor: _____ Major/Overall GPA: _____

4. Minority status (optional, circle one which applies):

Native American African-American Hispanic Pacific Islander

5. Citizenship/immigration status (circle one):
US citizen US permanent resident other

If you are not a US citizen or US permanent resident, please still complete this application. You can discuss with your adviser about other funding or apply for Charles Center funding.

6. Will you require housing in the summer of 2014? If so, what time period?
(On-campus housing is available from May 26 to August 3)

7. Mathematics GPA:

Mathematics courses (course numbers and names) taken:

8. Other related courses (course numbers and names) taken:

9. Do you have previous research experience? If yes, please give a brief description.

10. Please describe any other experiences relevant to mathematics/data science.

11. Are you currently working with or plan to work with a specific professor? If so, list the professor's name here and please submit a one page project proposal with your application.