Read Brown
Draft - Durf FAST Grant application questions

1) Provide sufficient background to contextualize your area of research interest. An educated, non-expert reader should be able to fully understand your topic. Include References.

In high school, I developed an interest in the history of cryptography with a particular focus on the life stories of cryptographers. In the course of my reading on the subject, I was especially intrigued by the roles of African American, Native American, and female cryptographers. Eager to learn more, I looked for a bibliography of books and articles on the history of cryptography. While there are several bibliographies in the general field of cryptography, most of them are several years out of date, and none that I found specifically dealt with cryptographers or the history of cryptography. I would like to fill that gap by producing an annotated bibliography of books and articles about the history of cryptography with a particular focus on the lives of cryptographers. I will include published as well as unpublished material, including PhD dissertations, master's degree theses, and archival resources such as unpublished diaries and manuscripts.

My aim in assembling the bibliography is to create a useful resource to scholars working in the field of cryptography. I am particularly interested in calling attention to the many mathematicians and scientists who have contributed to the field but are not widely known.

To build this bibliography, I plan to consult the following sources:

(1) Online databases, including OCLC, MathSciNet, Worldcat, JSTOR, the Library of Congress catalog, and Amazon.

(2) General bibliographies relating to cryptography, including:

Galland Joseph. *An Historical and Analytical Bibliography of the Literature of Cryptology (Cryptography)*. Pantagraph Press, 1945.

Naval Historical Center. *Navajo Code Talkers: A Select Bibliography*. Naval Historical Center, 2019.

Shulman, David. *An Annotated Bibliography of Cryptography*. Garland, 1976.

Volts, James D. *Bibliography of Cryptography*. Cincinnati, 1941.

I also will consult with research librarians and scholars in the field of mathematics and computer science.

2) Explain the specific goals of your training project: e.g., What general and specific research skills do you expect to gain? How will completing this project enable you to carry out independent research in the future?

The process of identifying sources to include in the bibliography will provide me with valuable research experience. I will learn about the various databases that are available for this sort of research and have the chance to explore them and learn their nuances. I also anticipate that this project will give me the opportunity to develop positive working relationships with reference librarians and scholars.

The skills I develop will make me a more confident and skilled researcher, both in the field of cryptography and in general.

3) Describe the significance of this training: What will it contribute to your understanding of the field? How is it relevant to your current and future academic, personal and/or professional goals?

Assembling this bibliography and writing the annotations will offer me a breadth of knowledge about the history of cryptography. As an honors math and computer science major who plans to also minor in cybersecurity, such information will be of value when I am taking relevant coursework and when it comes time for me to pick a topic for my honors research project.

As for my professional goals, my current plan is to acquire a PhD in information security and to eventually advise corporate entities on their security needs. This project will give me a sense of where cryptographic research has been done in the past and where interesting work is being done now. This knowledge will prove valuable when it comes time for me to identify PhD programs to which I can apply. I also anticipate that the knowledge I gain from this process will be useful when I enter the industry.

4) Describe your timeline for completing this training, including the project's start and end dates and estimated number of hours per week dedicated to the work.

I intend to conduct this research during the summer of 2019. I will be working for a law firm four days a week (Monday through Thursday) and intend to work on this project one work day a week (Fridays), as well as nights and weekends, when needed.

I anticipate beginning work on the project on May 30 and working each Friday after that through Friday, August 2. I intend to work on the project 8 hours on each of those ten days. Under this schedule, I anticipate working approximately eighty hours (8 hour days x 10 days).

Budget

Item	Cost	Purpose
Galland Joseph. *An Historical and Analytical Bibliography of the Literature of Cryptology (Cryptography)*. Pantagraph Press, 1945.	$32.99 from Amazon	Will be a key resource in identifying sources. It is not available at the NYU library or at any libraries in my hometown.
Shulman, David. *An Annotated Bibliography of Cryptography*. Garland, 1976.	$61.49 from Amazon	Will be a key resource in identifying sources. It is not available at the NYU library or at any libraries in my hometown.
Roundtrip Train Ticket to Washington, D.C. from my home in Washington, D.C.	Estimated $100.00 (Depends on when tickets are booked)	I will be able to do a lot of the research at libraries in and around the Richmond area, where I will be living this summer. However, I anticipate needing to spend at least a few days at the Library of Congress. (Note: I will not accrue any housing costs while there because I will be able to stay with family.)
TOTAL REQUESTED	$194.48	