

PERSONAL INFORMATION

Applicant ID: 1000288973

Prefix:

First Name: Brian

Middle Name: Connor

Last Name: McClellan

Suffix:

Previous Last Name 1:

Previous Last Name 2:

ORCID Identifier:

Mailing Address

Street Address: 200 Stribling Ave

Unit A

City: Charlottesville

State: VA

Zip Code: 22903

Country: United States

E-mail: cmcclellan1010@gmail.com

Phone Number: 8504594006

Permanent Address

Same as mailing address: N

Street Address: 5406 Lawton Ct

City: Tallahassee

State: FL

Zip Code: 32317

Country: United States

E-mail: cmcclellan1010@gmail.com

Phone Number: 8504594006

Date of Birth

Date of Birth: 10/10/1996

State: FL

Country: United States

Citizenship: US Citizen

If permanent resident, date status was granted:

High School Location

City: Tallahassee

State: FL

Country: United States

Demographic Information

Gender: Male

Veteran Status: No

Ethnicity: Not Hispanic or Not Latino

Race: White
 Disability: No

EDUCATION AND WORK EXPERIENCE

List academic institutions attended and your enrollment details.

Academic Institution	Location	Start Date	End Date	Degree Granting Program	Degree	Degree Cmpl.	Grad. Date	Field of Study	Cum. GPA	GPA Basis
University of Florida	GAINESVILLE, FL, United States	08/2015	05/2019	Yes	BS	Yes	05/2019	Physics and Astronomy - Astronomy and Astrophysics	3.98	4.0
UNIVERSITY OF VIRGINIA	CHARLOTTESVILLE, VA, United States	08/2019	05/2024	Yes	PhD	No, still enrolled in program		Physics and Astronomy - Astronomy and Astrophysics	4.0	4.0

List teaching and work experiences relevant to your field of study since you began undergraduate studies. Experiences do not have to be limited to the academic realm.

Title	Institution/Organization	Start Date	Other Experience Ongoing	End Date
Head Teaching Assistant	University of Virginia Department of Astronomy	07/2020	Yes	
Graduate Research Assistant	University of Virginia Department of Astronomy	04/2020	No	08/2020
Graduate Teaching Assistant	University of Virginia Department of Astronomy	08/2019	Yes	
Post-Baccalaureate Researcher	University of Florida Department of Astronomy	05/2019	No	08/2019
Undergraduate Teaching Assistant	University of Florida Department of Astronomy	08/2018	No	12/2018
Research Assistant	National Radio Astronomy Observatory	05/2018	No	08/2018
IT Specialist	University of Florida Computing Help Desk	08/2017	No	08/2018

List any significant academic honors, fellowships, scholarships, publications and presentations.

Publications

McClellan et al. (in prep), "Resonant Scattering in a Uniform Sphere with Large Optical Depth", ApJ
 Narayanan et al. 2020, "Powderday: Dust Radiative Transfer for Galaxy Simulations", ApJ (Resubmitted after review)
 Townsend et al. 2018, "Optical/X-ray Flux Decoupling in MAXI J1820+070", The Astronomer's Telegram, vol 11574 p. 1

Presentations

01/2020 "Photospheric Radius Expansion in Type-I X-ray Bursts", MS Qualifying Examination, Charlottesville VA

04/2019 "Analysis of Non-Pulsar Variable Stars Using PRESTO", Senior Thesis Defense, Gainesville FL
01/2019 "High-Mass Star Formation in Protoclusters of W51", AAS #233, Seattle WA
08/2019 "High-Mass Star Formation in Protoclusters of W51", NRAO Array Operations Center, Socorro NM
03/2018 "Obtaining Light Curves of Ultra-Magnetic B Stars with Evryscope", University Scholars Program Symposium, Gainesville FL

Scholarships

2017 - 2018 University Scholars Program
2015 - 2019 East Coast Charitable Foundation Scholarship
2015 - 2019 Florida Academic Scholars Award

Honors

Phi Beta Kappa Honor Society
Inaugural Lead Major in Astrophysics, University of Florida 2019 Commencement Ceremony
Department of Astronomy Senior Thesis Award, University of Florida
College of Liberal Arts and Sciences Student Excellence Award Finalist, University of Florida
Anderson Scholar with Highest Distinction, University of Florida
President's Honor Roll, University of Florida
Dean's List, University of Florida

Observing Proposals

VLA/19A-254: Disks and Outflows around O-type stars in W51, Co-I, 15 hours, re-Approved

Baccalaureate Institution: University of Florida

Current Institution: UNIVERSITY OF VIRGINIA

Are you or have you been in a joint bachelor's-master's degree program? No

PROPOSED FIELD OF STUDY

Major Field of Study: Physics and Astronomy - Astronomy and Astrophysics

Is your proposed graduate study interdisciplinary? No

PROPOSED GRADUATE STUDY

Proposed Academic Institution: University of Virginia Main Campus

Proposed Graduate Program: PhD in Astronomy

City: CHARLOTTESVILLE

State: VA

Country: United States

REFERENCES

List names and organizational affiliations of individuals submitting Letters of Reference (two reference letters must be received at NSF by the published deadline, October 30, 2020 (Friday) 4:00 p.m. Eastern Time, for the application to be reviewed). You are strongly encouraged to provide three reference letters.

Last Name	First Name	MI	Organization	E-mail Address	Ref. Rank	Status
Davis	Shane	W	University of Virginia Department of Astronomy	swd8g@virginia.edu	1	Unsubmitted
Narayanan	Desika		University of Florida Department of Astronomy	desika.narayanan@gmail.com	3	Received
Arras	Phil	L	University of Virginia Department of Astronomy	pla7y@virginia.edu	2	Unsubmitted

PERSONAL, RELEVANT BACKGROUND AND FUTURE GOALS STATEMENT

Please outline your educational and professional development plans and career goals. How do you envision graduate school preparing you for a career that allows you to contribute to expanding scientific understanding as well as broadly benefit society?

Describe your personal, educational and/or professional experiences that motivate your decision to pursue advanced study in science, technology, engineering or mathematics (STEM). Include specific examples of any research and/or professional activities in which you have participated. Present a concise description of the activities, highlight the results and discuss how these activities have prepared you to seek a graduate degree. Specify your role in the activity including the extent to which you worked independently and/or as part of a team. Describe the contributions of your activity to advancing knowledge in STEM fields as well as the potential for broader societal impacts (See Solicitation, Section VI, for more information about Broader Impacts).

NSF Fellows are expected to become globally engaged knowledge experts and leaders who can contribute significantly to research, education, and innovations in science and engineering. The purpose of this essay is to demonstrate your potential to satisfy this requirement. Your ideas and examples do not have to be confined necessarily to the discipline that you have chosen to pursue.

If you have completed more than one academic year in a graduate degree-granting program or a graduate or professional degree, followed by an interruption of at least two consecutive years, please address the reasons for the interruption in graduate study here.

Document Uploaded: Yes

GRADUATE RESEARCH PLAN STATEMENT

Present an original research topic that you would like to pursue in graduate school. Describe the research idea, your general approach, as well as any unique resources that may be needed for accomplishing the research goal (i.e., access to national facilities or collections, collaborations, overseas work, etc.). You may choose to include important literature citations. Address the potential of the research to advance knowledge and understanding within science as well as the potential for broader impacts on society. The research discussed must be in a field listed in the Solicitation (Section X, Fields of Study).

Document Uploaded: Yes

Proposed Research Title

The title should be brief, informative, scientifically or technically valid, intelligible to a scientifically or technically literate reader, and suitable for use in the public press. It should describe in succinct terms your proposed research, reflecting the contents of your proposal. Use key words, and do not use abbreviations and chemical formulas (in 255 characters or less). This title will be used for searching research topics using the key words you supply. Do not use curly brackets, {}, in your Proposed Research Title or Key Words.

Proposed Research Title: The Role of Resonance Line Radiation in Exoplanet Atmospheres

Use key words to describe the Graduate Research Plan Statement (in 50 characters or less).

Key Words: monte carlo, radiation, exoplanets, simulation

NSF GRFP PROGRAM INFORMATION

Select the level that most appropriately describes your stage of study at the GRFP application deadline. All enrollment in graduate or professional degree-granting programs must be included.

Second year graduate student who has completed no more than one academic year of graduate study while enrolled in a graduate degree-granting program, does not have a graduate degree (see joint Bachelor's-Master's description below) and has never applied to GRFP before as a graduate student or returning graduate student.

Joint Bachelor's-Master's degree holders who progressed to a doctoral program the semester following award of joint degree, who have not applied previously as graduate students, may apply as first-year doctoral students only.

Advisor

If you are currently enrolled in graduate school (Levels 2 or 3), provide the name(s) of your current or potential graduate research advisor(s). If you do not have a current or potential graduate research advisor, provide the contact information of your graduate program director. Entry of at least one advisor is required with a maximum of three.

First Name	MI	Last Name	E-mail Address
Shane	W	Davis	swd8g@virginia.edu
Phil	L	Arras	pla7y@virginia.edu

NSF publishes the names, the baccalaureate and current institutions, and the fields of study of Fellowship recipients and Honorable Mention List on NSF GRFP site.

Do you wish your name to be published on the Honorable Mention List, posted at <https://www.research.gov/grfp/>?
Yes