

Science Undergraduate Laboratory Internships (SULI)

Summer 2022 - Application for: Jason William Flittie

APPLICANT PROFILE

General Applicant Information

First Name: Jason

Middle Name: William

Last Name: Flittie

Previous Last Name(s):

Primary Email Address: jjkflittie@yahoo.com

Alternate Email Address 1:

Alternate Email Address 2:

ORCID: [0000-0001-8269-8411](https://orcid.org/0000-0001-8269-8411)

Current Address

Primary Phone Number: 805-377-7526

Alternate Phone Number:

Citizenship/Languages/Eligibility Information

I will be 18 years of age or older by the time the internship begins: Yes

Are you a U.S. Citizen? Yes

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EDUCATIONAL BACKGROUND

Academic Information

Are you currently attending a community college or 2-year college?

No

Current academic status:

Junior

If you are selected as a participant in this DOE program, will you receive academic credit from your university/college for participating?

No

Science Undergraduate Laboratory Internships (SULI)

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Undergraduate Institution Information

College/University Country:	United States and U.S. Territories
College/University State/Province/Territory:	Michigan
College/University Name:	Michigan Technological University
College/University Address:	1400 Townsend Dr
College/University City:	Houghton
College/University Zip Code:	49931-1295
Expected/Declared Major:	Physical Sciences - Physics
Expected Degree From This College/University:	Bachelor's
Expected/Completed Graduation Date:	May / 2023
Transcript:	Flittie_MTU_Fall_2021_unofficial_transcript.pdf
Does this institution provide grades?	Yes
GPA Scale:	4.0
Total Attempted Credits:	6.00
Total Earned Credits:	6.00
Total Quality Points:	22.50
GPA:	3.75
College/University Country:	United States and U.S. Territories
College/University State/Province/Territory:	Colorado
College/University Name:	United States Air Force Academy
College/University Address:	Air Force Academy
College/University City:	U S Air Force Academy
College/University Zip Code:	80840-5651
Expected/Declared Major:	<ul style="list-style-type: none"> Physical Sciences - Physics Physical Sciences - Chemistry
Expected Degree From This College/University:	Bachelor's
Expected/Completed Graduation Date:	May / 2023
Transcript:	Flittie-J-USAFA_transcript.pdf
Does this institution provide grades?	Yes
GPA Scale:	4.0
Total Attempted Credits:	82.50
Total Earned Credits:	71.50
Total Quality Points:	211.20
GPA:	2.95

Science Undergraduate Laboratory Internships (SULI)

Summer 2022 - Application for: Jason William Flittie

Overall Cumulative GPA:	3.02
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Science Undergraduate Laboratory Internships (SULI)

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Science, Technology, Engineering and Mathematics (STEM) Courses

Course Title: Advanced Physics Laboratory

Course Number: 3480

Enrollment Status: Currently Enrolled

Course Title: Analytical Chemistry

Course Number: 250

Enrollment Status: Recently Completed

Course Title: Classical Mechanics

Course Number: 356

Enrollment Status: Recently Completed

Course Title: Differential Equations

Course Number: 253

Enrollment Status: Recently Completed

Course Title: Electromagnetic Theory 1

Course Number: 4210

Enrollment Status: Recently Completed

Course Title: Electromagnetic Theory 2

Course Number: 4211

Enrollment Status: Currently Enrolled

Course Title: Engineering Mathematics

Course Number: 346

Enrollment Status: Recently Completed

Course Title: Instrumental Analysis

Course Number: 434

Enrollment Status: Recently Completed

Course Title: Modern Physics

Course Number: 264

Enrollment Status: Recently Completed

Course Title: Nuclear Physics

Course Number: 310

Science Undergraduate Laboratory Internships (SULI)

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Enrollment Status:	Recently Completed
Course Title:	Organic Chemistry 1
Course Number:	234
Enrollment Status:	Recently Completed
Course Title:	Organic Chemistry 2 & Lab
Course Number:	235
Enrollment Status:	Recently Completed
Course Title:	Physical Chemistry 1
Course Number:	371
Enrollment Status:	Recently Completed
Course Title:	PHYSICAL CHEMISTRY II (Quantum Chemistry)
Course Number:	336
Enrollment Status:	Recently Completed
Course Title:	Quantum Mechanics 1
Course Number:	3410
Enrollment Status:	Currently Enrolled
Course Title:	Thermodynamics and Statistical Mechanics
Course Number:	3300
Enrollment Status:	Currently Enrolled
High School Graduation or GED	
Date of High School Graduation or GED:	May / 2017
Country:	United States
City:	Camarillo
State/Province/Territory:	CA

Science Undergraduate Laboratory Internships (SULI)

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WORK EXPERIENCE & SKILLS

Work Experience

Name of Place of Employment or Activity:	US Air Force
Dates of Employment or Activity:	From 6/29/2017 To 6/4/2021
Hours Per Week:	60.0
Primary Duties:	Air Force Academy Cadet
Tasks Performed:	Academic classes, military training, leadership training

Professional Associations

Are you a member of any professional organizations?	No
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Computer Skills

Computer related skills:	Working knowledge of MATLAB
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Laboratory/Technical Skills

Experience with advanced laboratory techniques or equipment:	ICP-OES/MS, NMR, SEM/EDX, Laser and optics equipment, Optical atomic spectroscopy, HPLC, various chemical synthesis and reaction techniques.
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Science Undergraduate Laboratory Internships (SULI)

Summer 2022 - Application for: Jason William Flittie

PROGRAM INFORMATION

Eligibility

Have you previously participated in 2
SULI appointments? No

Previous DOE Internship/Fellowship or Lab Activity Experience

Have you ever had an
internship/fellowship with the
Department of Energy or any of its
National Laboratories (such as SULI,
CCI, VFP) or attended an activity at
one of the National Laboratories
(such as a Mini-Semester or
Sustainable Research Pathways)? No

Availability

What is the earliest date you can
begin your internship? 5/3/2022

When do you need to complete your
internship? 8/24/2022

First Choice Host DOE Laboratory

DOE Laboratory: Thomas Jefferson National Accelerator Facility (TJNAF)

First Choice Research Area: High Energy Physics

Second Choice Research Area: Accelerator Physics/Science

Third Choice Research Area: Nuclear Physics

Second Choice Host DOE Laboratory

DOE Laboratory: General Atomics / DIII-D

First Choice Research Area: Plasma and Fusion Sciences

Second Choice Research Area: Nuclear Science

Third Choice Research Area: Quantum Materials

Relatives Employed at DOE Laboratories

Are you a relative of an employee at
the proposed host DOE laboratories? No

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ESSAYS

Research Experience:	I was a part of a research group at the US Air Force Academy in which we developed and tested methods for determining the origins of man-made materials. Using SEM/EDX, we sought to determine isotope ratios of certain elements that would determine the region in which the material was synthesized. The PI gave me information and locations on the fibers on which to measure isotope ratios. I did the sample preparation and ran the SEM/EDX myself and recorded information after analysis. Separately, I did a research internship at the Defense Intelligence Agency on a classified project.
Research Interests:	I have had the opportunity to experience most fields of physics through my academic education, internships, and personal reading. This, coupled with my goals in life and ways I want to contribute to society, have lead me to narrow my primary interests in physics. Particle/nuclear physics research and nuclear power are fields that I heavily favor. Nuclear physics/engineering has always been of importance to me, as I believe that fission/fusion power is necessary to guarantee an overabundance of sustainable energy to support our exponentially technologically evolving society. Particle/subatomic physics is my most heavily favored field of study, as I always find interest in being on the edge of technological breakthroughs. The CEBAF at Jefferson Lab and the Tokamak run by General Atomics are the main reasons behind my lab requests for the reasons stated above.
Personal Experience:	My high performance and motivation in academic and workplace endeavors, as evidenced in my CV and transcripts, will allow me to excel in research laboratory environments. I currently volunteer with Habitat for Humanity, working in housing construction in the Copper Country HFH region. My desire to make a positive difference in our world translates to, among other traits, a high willingness to work hard. I have a significant background in undergraduate physics, chemistry, and technology studies that would provide me with a knowledge base to contribute as an intern under the SULI program. I learned how to function effectively in a professional environment through my training and work in the Air Force.
Professional Goals:	I plan to continue my academic studies into the graduate level, and use knowledge from those programs to enter industry and/or research in the nuclear/particle physics fields. I am unsure of what exact type jobs in physics/nuclear power I will be interested in or apply for, but any experience in undergraduate internships under the SULI program would prepare me for working in the scientific industry. Learning how to apply classroom knowledge to real-world problems would be especially educational, as that is the ultimate goal of any academic learning. Learning to be more proficient in technical communication with other scientists would also help me prepare for graduate school and my future workplace endeavors.

RECOMMENDATIONS

Recommendation 1:	First Name: Jonathan Last Name: Hoang Email: jonathan.dan.hoang@gmail.com Status: Received 1/12/2022
Recommendation 2:	First Name: Katrina Last Name: Black Email: keblack@mtu.edu Status: Received 1/12/2022

Jason W. Flittie
Jan 04, 2022 06:01 pm

Unofficial Academic Transcript for: Jason W. Flittie



Michigan Technological University

*This is NOT an official transcript. Courses which are in progress may also be included on this transcript.
This transcript does not reflect the grades for repeated (excluded) courses.*

Repeat Codes:

I = Course Repeated (included in GPA, cumulative totals, etc.)

E = Course Repeated (excluded from GPA, cumulative totals, etc.)

Please use Internet Explorer when printing this page.

[Transfer Credit](#) [Institution Credit](#) [Transcript Totals](#) [Courses in Progress](#)

STUDENT INFORMATION

Student Type: Continuing Undergrad

Curriculum Information

Current Program

College: College of Sciences & Arts

Major and Department: Applied Physics, Physics

***Transcript type:WWWW is NOT Official ***

TRANSFER CREDIT ACCEPTED BY INSTITUTION [-Top-](#)

2015-2017: CALIF STATE UNIV - CHANNEL ISL

Subject	Course	Level	Title	Grade	Credit Hours	R
TRU	XXXX	UG	Unassigned Transfer	TR	1.000	0.00 I
TRU	XXXX	UG	Unassigned Transfer	TR	3.000	0.00 I
TRU	XXXX	UG	Unassigned Transfer	TR	3.000	0.00 I
TRU	XXXX	UG	Unassigned Transfer	TR	3.000	0.00 I
TRU	XXXX	UG	Unassigned Transfer	TR	3.000	0.00 I

Total Earned Credits: 13.000

*** Unofficial Transcript ***

2017-2020: USAF ACADEMY

Subject	Course	Level	Title	Grade	Credit Hours	R
HU	2241	UG	Lev I-A Less Comm Taught Lang	TR	3.000	0.00
HU	2242	UG	Lev I-B Less Comm Taught Lang	TR	3.000	0.00
HU	2503	UG	Introduction to Literature	TR	3.000	0.00
PE	0126	UG	Beginning Volleyball	TR	0.500	0.00
PSY	2000	UG	Introduction to Psychology	TR	3.000	0.00

SS	2600	UG	American Government & Politics	TR	3.000	0.00	
TRU	XXXX	UG	Unassigned Transfer	TR	0.500	0.00	I
TRU	XXXX	UG	Unassigned Transfer	TR	0.500	0.00	I
TRU	XXXX	UG	Unassigned Transfer	TR	0.500	0.00	I
TRU	XXXX	UG	Unassigned Transfer	TR	0.500	0.00	I
TRU	XXXX	UG	Unassigned Transfer	TR	0.500	0.00	I
TRU	XXXX	UG	Unassigned Transfer	TR	1.000	0.00	I
TRU	XXXX	UG	Unassigned Transfer	TR	3.000	0.00	I
TRU	XXXX	UG	Unassigned Transfer	TR	3.000	0.00	I
TRU	XXXX	UG	Unassigned Transfer	TR	3.000	0.00	I
TRU	XXXX	UG	Unassigned Transfer	TR	3.000	0.00	I
TRU	XXXX	UG	Unassigned Transfer	TR	3.000	0.00	I
TRU	XXXX	UG	Unassigned Transfer	TR	3.000	0.00	I
TRU	XXXX	UG	Unassigned Transfer	TR	3.000	0.00	I
TRU	XXXX	UG	Unassigned Transfer	TR	3.000	0.00	I
TRU	XXXX	UG	Unassigned Transfer	TR	3.000	0.00	I
TRU	XXXX	UG	Unassigned Transfer	TR	3.000	0.00	I
TRU	XXXX	UG	Unassigned Transfer	TR	3.000	0.00	I
TRU	XXXX	UG	Unassigned Transfer	TR	3.000	0.00	I
TRU	XXXX	UG	Unassigned Transfer	TR	3.000	0.00	I
TRU	XXXX	UG	Unassigned Transfer	TR	3.000	0.00	I
TRU	XXXX	UG	Unassigned Transfer	TR	3.000	0.00	I
TRU	XXXX	UG	Unassigned Transfer	TR	3.000	0.00	I
TRU	XXXX	UG	Unassigned Transfer	TR	3.000	0.00	I
TRU	XXXX	UG	Unassigned Transfer	TR	3.000	0.00	I
TRU	XXXX	UG	Unassigned Transfer	TR	4.500	0.00	I
UN	1015	UG	Composition	TR	3.000	0.00	

Total Earned Credits: 71.500

*** Unofficial Transcript ***

INSTITUTION CREDIT [-Top-](#)

Term: Fall 2021

College: College of Sciences & Arts

Major: General Sciences and Arts

Subject	Course	Level	Title	Grade	Credit Hours	Quality Points	R
PH	3210	UG	Optics	A	3.000	12.00	
PH	4210	UG	Electricity and Magnetism I	AB	3.000	10.50	

*** Unofficial Transcript ***

TRANSCRIPT TOTALS (UNDERGRADUATE) [-Top-](#)

	Attempt Hours	Passed Hours	Earned Hours	GPA Hours	Quality Points	GPA
Total Institution:	6.000	6.000	6.000	6.000	22.50	3.75
Total Transfer:	0.000	0.000	84.500	0.000	0.00	0.00
Overall:	6.000	6.000	90.500	6.000	22.50	3.75

*** Unofficial Transcript ***

COURSES IN PROGRESS

[-Top-](#)

Term: Spring 2022

College: College of Sciences & Arts
Major: Applied Physics

Subject	Course	Level	Title	Credit Hours
PH	2230	UG	Electronics for Scientists	4.000
PH	3300	UG	Thermo and Statistical Mech	3.000
PH	3410	UG	Quantum Physics I	3.000
PH	3480	UG	Advanced Physics Laboratory	2.000
PH	4211	UG	Electricity and Magnetism II	3.000

*** Unofficial Transcript ***

[Overall Financial Aid Status](#)[Financial Aid Eligibility Menu](#)

UNITED STATES AIR FORCE ACADEMY

Office of the Registrar Transcript

Name: **FLITTIE, JASON WILLIAM**
Degree:
Major(s):

Academic Order of Merit:
Minor(s):

Class of: **2021**

Date Entered USAF Academy: **29-JUN-2017**
High School: **ADOLFO CAMARILLO HIGH SCHOOL**
CAMARILLO, CALIFORNIA
High School Graduation: **2017**

Commissioned:
Graduation Recognition:

COURSE	DESCRIPTIVE TITLE	HRS	GRADE	GPTS	COURSE	DESCRIPTIVE TITLE	HRS	GRADE	GPTS
VALIDATION CREDIT AWARDED					SUMMER TERM 2018				
BIOLOGY 215	INTRO TO BIOLOGY W/LAB	3.00			MILTNG 205	SUMMER PROGRAM SUPPORT		P	
ECON 201	INTRODUCTION TO ECONOMICS	3.00			MILTNG 270	EXPEDITIONARY SURVIVAL TRG-EST		P	
ENGRMECH 220	FUNDAMENTALS OF MECHANICS	3.00			UAS 200	BASIC UAS-RPA PILOTING		P	
HISTORY 300	WORLD HISTORY	3.00				CUM-HRS 34.75	CUM-GPA	3.16	
MATH 141	CALCULUS I	3.00							
MATH 142	CALCULUS II	3.00							
PHYSICS 110	GENERAL PHYSICS I	3.00							
PHYSICS 215	GENERAL PHYSICS II	3.00							
TRANSFER CREDIT AWARDED					FALL SEMESTER 2018				
CALIFORNIA STATE UNIVERSITY, CAMARILLO, CA, 2016					CHEM 344	THEORY/INSTRUMENTAL METHODS OF	3.00	C-	5.10
CHEM 335	PHYSICAL CHEMISTRY	3.00			MATH 346	ENGINEERING MATH	3.00	B	9.00
CHEM 233	ORGANIC CHEMISTRY	3.00			MSS 251	AIRPOWER & JOINT OPS STRATEGY	4.50	B+	14.85
CHEM 200	GENERAL CHEMISTRY II	4.00			PHYED 111	SWIMMING	.50	D	0.50
CALIFORNIA STATE UNIVERSITY, CAMARILLO, CA, 2015					PHYSICS 310	PRINCIPLES OF NUCLEAR SCIENCE	3.00	A-	11.10
CHEM 222	QUANTITATIVE ANALYSIS	4.00			PHYSICS 355	CLASSICAL MECHANICS	3.00	B	9.00
CHEM 100	GENERAL CHEMISTRY I	4.00			POLSCI 211	POLITICS, AMERICAN GOVERNMENT	3.00	B+	9.90
SUMMER TERM 2017					SEM-HRS 20.00	SEM-GPA 2.97	CUM-HRS 54.75	CUM-GPA	3.09
MILTNG 100	BASIC CADET TRAINING (BCT)		P		DEAN'S HONOR LIST				
PHYED 100	BASIC PHYSICAL TNG		P		SPRING SEMESTER 2019				
FALL SEMESTER 2017					CHEM 336	PHYSICAL CHEMISTRY II	3.00	A	12.00
ARMNSHP 250	INTRODUCTION TO SOARING		P		ECE 315	PRIN/AF ELECT & CYBER SYS	3.00	A	12.00
BEHSCI 110	INTRO TO BEHAVIORAL SCIENCES	3.00	A-	11.10	ENGLISH 211	LIT & INTERMEDIATE COMPOSITION	3.00	B	9.00
ENGLISH 111	INTRO/COMPOSITION & RESEARCH	3.00	C+	6.90	LAW 220	LAW/AIR FORCE OFFICERS	3.00	B-	8.10
HISTORY 100	INTRO TO MILITARY HISTORY	3.00	B+	9.90	LEADERSHI 200	FOUNDATIONS/INTERPERSONL LDSH	.75	F	
MATH 253	ADVANCED PLACED CALCULUS III	3.00	A	12.00	PHYED 211	BASIC WATER SURVIVAL	.50	B-	1.35
PHYED 110	BOXING	.50	C+	1.15	PHYED 345	FUNCTIONAL FITNESS	.50	A	2.00
RUSSIAN 131	BASIC RUSSIAN	3.00	B	9.00	PHYSICS 354	NUCLEAR WEAPONS ENGINEERING	3.00	B	9.00
SEM-HRS 15.50	SEM-GPA 3.23	CUM-HRS 15.50	CUM-GPA	3.23	PHYSICS 356	COMPUTATIONAL PHYSICS	3.00	D	3.00
SPRING SEMESTER 2018					PHYSICS 499	NUCLEAR FUEL CYCLE RESEARCH	1.00	A	4.00
BEHSCI 100	FOUNDATIONS OF PERS LEADERSHIP	.75	B	2.25	SEM-HRS 20.00	SEM-GPA 2.91	CUM-HRS 74.75	CUM-GPA	3.04
CHEM 234	ORGANIC CHEMISTRY II	3.00	B+	9.90	ACADEMIC PROBATION				
CHEM 243	ORGANIC CHEMISTRY LAB	3.00	B+	9.90	SUMMER TERM 2019				
COMPSCI 110	INTRO TO COMPUTING & CYBER OPS	3.00	B	9.00	LEADERSHI 200	FOUNDATIONS/INTERPERSONL LDSH	.75	A	R 3.00
MATH 245	DIFF EQUA & MATRICES	3.00	B	9.00	MILTNG 201	OPERATION AF PROGRAM (OPSAF)		P	
PHYED 112	PHYSICAL DEVELOPMENT	.50	B+	1.65	MILTNG 402	BCT CADRE (2ND BCT)		P	
PHYSICS 264	MODERN PHYSICS	3.00	A-	11.10	SEM-HRS 0.75	SEM-GPA 4.00	CUM-HRS 75.50	CUM-GPA	3.08
RUSSIAN 132	BASIC RUSSIAN	3.00	C+	6.90					
SEM-HRS 19.25	SEM-GPA 3.10	CUM-HRS 34.75	CUM-GPA	3.16					
DEAN'S AND ATHLETIC'S HONOR LISTS									

UNITED STATES AIR FORCE ACADEMY

Office of the Registrar

Transcript

Name: **FLITTIE, JASON WILLIAM**

Degree:

Major(s):

Academic Order of Merit:

Minor(s):

Class of: **2021**

Date Entered USAF Academy: **29-JUN-2017**

High School: **ADOLFO CAMARILLO HIGH SCHOOL
CAMARILLO, CALIFORNIA**

High School Graduation: **2017**

Commissioned:

Graduation Recognition:

COURSE		DESCRIPTIVE TITLE	HRS	GRADE	GPTS	COURSE	DESCRIPTIVE TITLE	HRS	GRADE	GPTS
FALL SEMESTER 2019										
CHEM	481	BIOCHEMISTRY I	3.00	WP						
CHEM	499	CARBON FIBER ANALYSIS	3.00	WP						
PHYED	484	VOLLEYBALL	.50	B+	1.65					
PHYSICS	341	LABORATORY TECHNIQUES	4.00	WP						
PHYSICS	361	ELECTROMAG THEORY I	3.00	C-	5.10					
PHYSICS	450	NUCLEAR WEAPONS EFFECTS	3.00	C	6.00					
SOCSCI	311	INTERNATIONAL SECURITY STUDIES	3.00	WP						
SEM-HRS	6.50	SEM-GPA 1.96	CUM-HRS 82.00	CUM-GPA	2.99					
ACADEMIC PROBATION										
SPRING SEMESTER 2020										
AEROENGR	315	FUNDAMENTALS OF AERONAUTICS	3.00	I						
LEADERSHI	300	FOUNDATIONS FOR TEAM LEADERSHP	.75	F						
PHILOS	310	ETHICS	3.00	F						
PHYED	215	COMBATIVES I	.50	C+	1.15					
PHYED	315	COMBATIVES II	.50	W						
PHYED	315	COMBATIVES II	.50	W						
PHYSICS	341	LABORATORY TECHNIQUES	4.00	F						
PHYSICS	362	ELECTROMAG THEORY II	3.00	F						
SOCSCI	467	NUCLEAR WEAPONS POLICY & STRAT	3.00	F						
SEM-HRS	0.50	SEM-GPA 0.08	CUM-HRS 82.50	CUM-GPA	2.56					
ACADEMIC PROBATION										
SUMMER TERM 2020										
SEM-HRS		CUM-HRS 82.50	CUM-GPA	2.56						
WITHDRAWN FROM ACADEMICS ON 10-JUN-2020.										
TOTAL SEM HOURS 124.50										
***** END OF ACADEMIC RECORD *****										

SULI PROGRAM APPLICATION RECOMMENDATION FOR JASON WILLIAM FLITTIE

Recommender Contact Information

- **First Name:** Jonathan
- **Last Name:** Hoang
- **Title:** Major
- **Department:** NA
- **Institution/Organization:** US Air Force
- **Telephone:** 719-930-9968
- **Email:** jonathan.dan.hoang@gmail.com

Applicant Information

Association

Describe your relationship to the applicant, including how long you've known the applicant, where, and in what capacity.

I've known Jason for approximately 4 years now, where he started working on a collaborative research project with me during the 2017-2018 academic year, while he was a cadet at the US Air Force Academy. He later worked under me directly as an undergraduate researcher on a separate project for the 2018-2019 academic year, performing trace chemical analysis on materials.

Applicant Comments

Please provide substantive comments about the applicant's education, training, aptitude, or promise relevant to the SULI program. Include any relevant additional detail or perspective regarding the applicant's research experience or equivalent experience on complex projects, including the level of independence or other factors that would contribute to the applicant's ability to make an excellent contribution to the SULI program.

Jason, despite his hardships while a cadet at the US Air Force Academy did really well during his time there. He has an avid mind for science, an incredible eagerness to learn and grow, and strives to always better himself in all of his endeavors. He is a self-starter, driven, and highly motivated student, and it was a joy to work with him during our time together. He took an immediate affinity to the research we performed in the group, which was a blend of both new concepts and the applications of course work he had excelled in prior to joining the research group. He embraced the challenge, and required minimal supervision and guidance as he approached the research. While his project focused on trace chemical analysis in materials, he also took a leadership role within our group and worked with his peers to educate them on the analytical techniques we were going to use in our research. This speaks volumes to his ability and desire to push forward in our research endeavors. On top of Jason's heavy course load and the leadership positions he held within his cadet squadron, we met bi-weekly to discuss his research progress and our experimental methodology. Within his first year of research, Jason presented on his work to customers within the US government. The insights he uncovered led to numerous follow-up discussions with collaborators from the national labs and senior government officials.

I know he will do incredibly well with an internship at a DOE lab, while also opening his aperture for future endeavors supporting the US Government and the mission of advancing science in support of our country. I have no hesitation in offering him my highest recommendation for an internship through ORAU.

Applicant Rating

In comparison to other undergraduate students, please rate the applicant relative to his/her peers on the following qualifications:

	Do Not Know	Below Average	Average	Above Average	Superior
Analytical and Mathematical					X
Experimental Research					X
Overall Academic					X
Initiative and Self Reliance					X
Motivation toward Scientific Career					X
Originality of Thought					X
Emotional Maturity					X
Ability to Work with Others					X
Potential for Leadership					X
Oral Communication Skills					X
Written Communication Skills				X	

SULI PROGRAM APPLICATION RECOMMENDATION FOR JASON WILLIAM FLITTIE

Recommender Contact Information

- **First Name:** Katrina
- **Last Name:** Black
- **Title:** Senior Lecturer
- **Department:** Physics
- **Institution/Organization:** Michigan Technological University
- **Telephone:**
- **Email:** keblack@mtu.edu

Applicant Information

Association

Describe your relationship to the applicant, including how long you've known the applicant, where, and in what capacity.

I am Jason's academic advisor and his course instructor in our senior E&M sequence. I have known him since he transferred to Michigan Tech from the US Air Force Academy in Fall 2021.

Applicant Comments

Please provide substantive comments about the applicant's education, training, aptitude, or promise relevant to the SULI program. Include any relevant additional detail or perspective regarding the applicant's research experience or equivalent experience on complex projects, including the level of independence or other factors that would contribute to the applicant's ability to make an excellent contribution to the SULI program.

On August 30th, 2021, the first day of the fall semester, I received an email asking me to meet with a new physics major. He had just transferred to Michigan Tech, but none of his transfer credit had been assessed yet and he needed help getting into appropriate classes. I made some time in my schedule and that day met Jason for the first time. I learned that the reason for the late transfer wasn't disorganization, but that he had just been medically discharged from the US Air Force Academy. We discussed his math and physics background, looked at the intersection of physics classes that he hadn't already taken and that were offered that semester at Tech, and then walked down the hall together to senior electricity and magnetism.

Both as an advisor and instructor, I sometimes worry a bit when an unknown-to-me student jumps into an upper-level class, but it turns out I had no reason to worry about Jason. Last semester, he was one of the leaders in senior E&M, both academically and socially. Academically, his math and physical intuition are strong, and he is one of the top students in an exceptionally strong class. Socially, senior E&M involves considerable in-class small group work. Jason was able to integrate easily into a class of 10 other students who had known each other since freshman year. He was always willing to explain to others, but (more importantly and less frequently occurring among physics majors!), he was willing to ask for help when he was the one who needed an explanation.

Jason has also been involved with Habitat for Humanity and Michigan Tech Engineers Without Borders. We have frequently discussed his plans to become involved with nuclear physics research or nuclear power generation, and it is my opinion that he is both strongly motivated to pursue a career that serves humanity through the development of energy resources and intellectually suited to make that path a reality. He would greatly benefit from internship opportunities that would help him along this path.

Applicant Rating

In comparison to other undergraduate students, please rate the applicant relative to his/her peers on the following qualifications:

	Do Not Know	Below Average	Average	Above Average	Superior
Analytical and Mathematical					X
Experimental Research	X				
Overall Academic	X				
Initiative and Self Reliance					X
Motivation toward Scientific Career					X
Originality of Thought	X				
Emotional Maturity					X
Ability to Work with Others					X
Potential for Leadership					X
Oral Communication Skills					X
Written Communication Skills				X	