

Science Undergraduate Laboratory Internships (SULI)

Summer 2022 - Application for: Ethan Alexander Zimmerman

APPLICANT PROFILE

General Applicant Information

First Name: Ethan

Middle Name: Alexander

Last Name: Zimmerman

Previous Last Name(s):

Primary Email Address: ethanzimmerman22@gmail.com

Alternate Email Address 1:

Alternate Email Address 2:

ORCID: [0000-0003-1163-8352](https://orcid.org/0000-0003-1163-8352)

Current Address

Primary Phone Number: 540-498-6063

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:

Sophomore

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

No

Undergraduate Institution Information

College/University Country: United States and U.S. Territories

College/University State/Province/Territory:

Virginia

College/University Name: James Madison University

College/University Address: 800 S Main St

College/University City: Harrisonburg

College/University Zip Code: 22807

Expected/Declared Major: Physical Sciences - Physics

Minor and/or Concentration Expected/Declared:

Mathematics

Expected Degree From This College/University:

Bachelor's

Expected/Completed Graduation Date:

May / 2024

Transcript: SSR_TSRPT (2).pdf

Does this institution provide grades? Yes

GPA Scale: 4.0

Total Attempted Credits: 43.00

Total Earned Credits: 43.00

Total Quality Points: 158.20

GPA: 3.68

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Science, Technology, Engineering and Mathematics (STEM) Courses

Course Title: Advanced Physics Laboratory I

Course Number: 344

Enrollment Status: Planning to Enroll

Course Title: Advanced Physics Laboratory II

Course Number: 345

Enrollment Status: Planning to Enroll

Course Title: Advanced Physics Laboratory III

Course Number: 346

Enrollment Status: Planning to Enroll

Course Title: Advanced Theoretical Physics

Course Number: 482

Enrollment Status: Planning to Enroll

Course Title: Analog Electronics

Course Number: 360

Enrollment Status: Planning to Enroll

Course Title: Calculus I

Course Number: 235

Enrollment Status: Recently Completed

Course Title: Calculus II

Course Number: 236

Enrollment Status: Recently Completed

Course Title: Calculus III

Course Number: 237

Enrollment Status: Recently Completed

Course Title: Computers & Numerical Algorithms

Course Number: 248

Enrollment Status: Planning to Enroll

Course Title: Data Acquisition & Analysis II

Course Number: 247

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Enrollment Status:	Currently Enrolled
Course Title:	Earth Systems and Climate Change
Course Number:	115
Enrollment Status:	Recently Completed
Course Title:	Electricity and Magnetism
Course Number:	350
Enrollment Status:	Planning to Enroll
Course Title:	Elementary Differential Equations
Course Number:	336
Enrollment Status:	Currently Enrolled
Course Title:	Elementary Statistics
Course Number:	220
Enrollment Status:	Recently Completed
Course Title:	Foundations of Physics
Course Number:	105
Enrollment Status:	Recently Completed
Course Title:	General Chemistry I
Course Number:	131
Enrollment Status:	Recently Completed
Course Title:	General Chemistry II
Course Number:	132
Enrollment Status:	Recently Completed
Course Title:	General Chemistry Laboratory I
Course Number:	131L
Enrollment Status:	Recently Completed
Course Title:	General Chemistry Laboratory II
Course Number:	132L
Enrollment Status:	Recently Completed
Course Title:	Linear Algebra

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Course Number:	300
Enrollment Status:	Currently Enrolled
Course Title:	Mechanics
Course Number:	340
Enrollment Status:	Planning to Enroll
Course Title:	Modern Physics
Course Number:	270
Enrollment Status:	Recently Completed
Course Title:	Modern Physics Laboratory
Course Number:	270L
Enrollment Status:	Recently Completed
Course Title:	Physics, Chemistry and the Human Experience
Course Number:	101
Enrollment Status:	Recently Completed
Course Title:	Quantum Mechanics
Course Number:	460
Enrollment Status:	Planning to Enroll
Course Title:	Relativity
Course Number:	330
Enrollment Status:	Planning to Enroll
Course Title:	Scientific Perspectives
Course Number:	104
Enrollment Status:	Recently Completed
Course Title:	Thermodynamics and Statistical Mechanics
Course Number:	380
Enrollment Status:	Planning to Enroll
Course Title:	University Physics I
Course Number:	240
Enrollment Status:	Recently Completed

Science Undergraduate Laboratory Internships (SULI)

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Course Title:	University Physics II
Course Number:	250
Enrollment Status:	Recently Completed
Course Title:	University Physics III
Course Number:	260
Enrollment Status:	Currently Enrolled
Course Title:	University Physics Laboratory I
Course Number:	240L
Enrollment Status:	Recently Completed
Course Title:	University Physics Laboratory II
Course Number:	250L
Enrollment Status:	Recently Completed
Awards or Honors	
Award Title:	Dean's List
Month & Year Received:	December / 2020
Awarding Institution:	James Madison University
Award Title:	Dean's List
Month & Year Received:	May / 2021
Awarding Institution:	James Madison University
Award Title:	President's List
Month & Year Received:	December / 2021
Awarding Institution:	James Madison University
High School Graduation or GED	
Date of High School Graduation or GED:	May / 2020
Country:	United States
City:	Stafford
State/Province/Territory:	VA

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WORK EXPERIENCE & SKILLS

Work Experience

Name of Place of Employment or Activity:	Virginia State Parks Youth Conservation Corps
Dates of Employment or Activity:	From 6/20/2021 To 8/7/2021
Hours Per Week:	40.0
Primary Duties:	<ul style="list-style-type: none"> - Leading, managing, and supervising groups of 10 crew members promoting a healthy teamwork atmosphere, and helping each crew member make the most of their experience - Help complete the same projects the crew members would work on, working together as a team - Monitoring, managing, and promoting the crew's physical and emotional safety on and off the worksite - Transporting the crew safely in a vehicle - Training and motivating the crew of 10 young adults to efficiently complete projects - Coordinating and communicating logistics and operations with co-leaders, park staff, the program coordinator, and the program director - Planning and incorporating weekend plans to engage the crew in recreational activities - Planning, attending and engaging the crew in environmental education and interpretive programs in the park - Participating in nightly conference calls for the duration of the program to give daily reports and obtain necessary information from the program coordinator
Tasks Performed:	<ul style="list-style-type: none"> - Built a picnic pad - Spread gravel on trails - Maintained park trails - Built benches throughout the park - Seeded hundreds of trees - Picked up trash along the beach - Built picnic tables - Built an arboretum - Finished building an amphitheater - Painted a fence
Name of Place of Employment or Activity:	Amazon Fulfillment Center
Dates of Employment or Activity:	From 5/29/2020 To 8/7/2020
Hours Per Week:	15.0
Primary Duties:	<ul style="list-style-type: none"> - Fulfilling online grocery orders to the satisfaction of each customer - Working in different environments - including refrigerated and freezer spaces for part of each shift - Examining and inspecting products for defects and damages - Ensuring that stocks and inventory are well-organized and maintained
Tasks Performed:	<ul style="list-style-type: none"> - Walked about eight miles a day throughout the facility - Lifted up to twenty-five pounds at a time to fulfill online orders - Fulfilled online orders to the satisfaction of the customer - Examined and inspected products for defects and damages - Ensured that stocks and inventory were well-organized and maintained
Professional Associations	
Are you a member of any professional organizations?	No
Computer Skills	
Computer related skills:	<ul style="list-style-type: none"> • Python Coding (Spyder) • Microsoft tools (Excel, Word, and PowerPoint) • Google tools (Docs, Drive, Calendar, Gmail, sheets, etc.) • Collaboration programs (Zoom, WebEx, Discord, etc.)

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Laboratory/Technical Skills

Experience with advanced laboratory techniques or equipment:

Skills

- Data processing with Python
- Using professional and precise technical language lab reports

Equipment I have used

- spectrometer
- multimeter
- ammeter
- voltmeter
- x-ray diffraction apparatus
- Geiger-Mueller counter
- Vernier LabQuest 2
- Scales

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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? 5/13/2022

When do you need to complete your
internship? 8/22/2022

First Choice Host DOE Laboratory

DOE Laboratory: Thomas Jefferson National Accelerator Facility (TJNAF)

First Choice Research Area: Accelerator Physics/Science

Second Choice Research Area: Nuclear Physics

Third Choice Research Area: High Energy Physics

Second Choice Host DOE Laboratory

DOE Laboratory: Oak Ridge National Laboratory (ORNL)

First Choice Research Area: Astronomy/Astrophysics

Second Choice Research Area: Nuclear Physics

Third Choice Research Area: High Energy Physics

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 have relevant research experience from my time in the various laboratory classes I have completed during my time at James Madison University. During those classes, I worked collaboratively in groups as well as independently to complete various projects. In my Modern Physics Laboratory class, I worked on several projects with a group of people. Working on this project together required a variety of skills such as recognizing the strengths of others and how to best incorporate them, clearly communicating with one another, and collectively understanding and analyzing any data. With these skills, our group was able to work together to construct a clear and concise report which was then presented to our professor. Furthermore, in my University Physics II Laboratory class, I worked on numerous projects independently. Working on my own required a different set of skills such as resourcefulness, greater comprehension, and the ability to effectively deliver my findings. I was able to further refine these skills during my time as a crew leader in the Virginia State Parks Youth Conservation Corps (VSPYCC), even while being in a non-laboratory environment. While working on projects in the VSPYCC, I ensured that everyone understood the common goal and that the important information about the task at hand was clearly communicated. These varying experiences have allowed me to develop and improve upon skills that are necessary for success in research at varying levels of independence.
Research Interests:	At my first-choice host laboratory, Thomas Jefferson National Accelerator Facility (TJNAF), the research area that piqued my interest the most was accelerator physics/science. I chose this research area because although I had not learned much about accelerator physics prior to this application, after researching the topic, I would be excited to learn more about it outside the classroom. Furthermore, I am interested in learning about the technical aspects of how particle accelerators work and how they are utilized in academic research and industry. Although my second-choice host laboratory, Oak Ridge National Laboratory (ORNL), also offered accelerator physics/science, I ultimately chose astronomy/astrophysics as my top choice research area because it is a field that has always intrigued me. I have always been interested in space and the many large-scale phenomena that exist within its vastness, such as neutron stars, galaxies light-years away, and all the intriguing planets they may harbor. For both my first and second choice host laboratories, I chose nuclear physics and high energy physics as my second and third choice research areas respectively. These are both topics that I have enjoyed learning about in some of the classes that I have taken and I found them to be research areas in which I would like to expand my knowledge. I chose TJNAF and ORNL as my top two host laboratories due to their locations being nearby or within my home state of Virginia.
Personal Experience:	I have had the privilege to be involved in a variety of collaborative settings throughout my time as a crew leader in the Virginia State Parks Youth Conservation Corps (VSPYCC) as well as in various classes at James Madison University (JMU). During my time in the VSPYCC, I gained experience leading, managing, and supervising groups of ten crew members. Throughout the program, I helped promote a healthy teamwork atmosphere and helped each crew member make the most of their experience by not holding them back and staying open-minded to any ideas they suggest. Furthermore, I was responsible for monitoring, managing, and encouraging the crew's physical and emotional safety on and off the worksite. I was also accountable for coordinating and communicating logistics and operations at various levels with co-leaders, park staff, the program coordinator, and the program director. In addition, I planned and attended environmental education and interpretive programs. Through my experience in the VSPYCC, I was able to enhance my leadership, collaboration, and communication skills, which are important skills to have in the environment presented by the SULI program. Throughout my time in the classes at JMU, I have acquired a multitude of laboratory and technical skills that are relevant to being an excellent contributing member to the SULI program. Some of the skills I have gained and improved include using Python for data processing and using professional and precise technical language in lab reports. In addition to this, I have gained experience in the use of laboratory instruments and interfaces including but not limited to: spectrometers, multimeters, voltmeters, ammeters, x-ray diffraction apparatuses, Geiger-Mueller counters, and Vernier LabQuest 2. Being familiar with the use of these laboratory instruments and interfaces would allow me to easily become familiar with similar laboratory instruments and interfaces, and be a successful member of the SULI program.
Professional Goals:	My long-term academic goal is to complete my Bachelor of Science degree in physics and then attend graduate school to pursue a doctoral degree in a related field. As of right now, I am not sure what my professional goals are, but I am hoping that the SULI program will help me narrow those down. One of my primary goals before graduation is to identify a specific field that will help me discover my professional ambitions by participating and learning about a variety of physics-related topics. Participation in the SULI program would help me refine and discover my strengths and gain knowledge to aid in identifying what subject area in physics I would like to pursue academically and professionally. The SULI program would also provide me with hands-on, collaborative experience working in a laboratory, which would allow me to gain skills and experience with new instrumentation in addition to allowing me to expand upon both soft and technical skills I already have. Ultimately, if given the opportunity, I am hoping that the experience I gather in the SULI program will help guide me towards my goals.

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RECOMMENDATIONS

Recommendation 1: **First Name:** Kendra
Last Name: Letchworth-Weaver
Email: letchwk1@jmu.edu
Status: Received 1/11/2022

Recommendation 2: **First Name:** Taylor
Last Name: Richardson-Cramer
Email: Richa3tc@dukes.jmu.edu
Status: Received 1/11/2022

Unofficial Transcript

Institution Info: James Madison University
South Main Street
Harrisonburg, VA 22807
United States

Name: Zimmerman,Ethan Alexander
Student ID:
Address:

Print Date: 12/27/2021

Milestone Level: MREST Proficient

Academic Program

Program: Undergraduate
Physics - BS Major
Fundamental Studies Concentration
Mathematics Minor

End of Unofficial Transcript

Beginning of Undergraduate Record

Fall Semester 2020

Course	Description	Attempted	Earned	Grade	Points
ISCI 101	PHYS, CHEM & HUMAN EXP	3.00	3.00	A-	11.100
MATH 235	CALCULUS I	4.00	4.00	A-	14.800
PHYS 105	FOUNDATIONS OF PHYSICS	1.00	1.00	A	4.000
PHYS 240	UNIVERSITY PHYSICS I	3.00	3.00	B+	9.900
PHYS 240L	UNIVERSITY PHYSICS LAB I	1.00	1.00	A	4.000
WRTC 103	RHETORICAL READING AND WRITING	3.00	3.00	B+	9.900

Test Credits Applied Toward Undergraduate

Course	Description	Attempted	Earned	Grade	Points
CHEM 131	GENERAL CHEMISTRY I	0.00	3.00	CR	0.000
CHEM 132L	GENERAL CHEMISTRY LAB	0.00	1.00	CR	0.000
CHEM 131L	GENERAL CHEMISTRY LAB	0.00	1.00	CR	0.000
CHEM 132	GENERAL CHEMISTRY II	0.00	3.00	CR	0.000
GEOL 115	EARTH SYSTEMS & CLIMATE CHANG	0.00	3.00	CR	0.000
ISAT 000	ANALYTICAL METHODS	0.00	4.00	CR	0.000
ISCI 104	SCIENTIFIC PERSPECTIVES	0.00	1.00	CR	0.000
MATH 220	ELEMENTARY STATISTICS	0.00	3.00	CR	0.000
PSYC 101	GENERAL PSYCHOLOGY	0.00	3.00	CR	0.000

Test Trans GPA: 0.000 Transfer Totals: 0.00 22.00 0.000

Term GPA	3.580	Term Totals	15.00	15.00	53.700
Cum GPA	3.580	Cum Totals	15.00	37.00	53.700

Term Honor: Dean's List
Academic Good Standing

Spring Semester 2021

Course	Description	Attempted	Earned	Grade	Points
MATH 236	CALCULUS II	4.00	4.00	A-	14.800
PHIL 150	ETHICAL REASONING	3.00	3.00	B	9.000
PHYS 250	UNIVERSITY PHYSICS II	3.00	3.00	B+	9.900
PHYS 250L	UNIVERSITY PHYSICS LAB II	1.00	1.00	A	4.000
SCOM 123	FUND HUMAN COMM: GROUP PRES	3.00	3.00	A	12.000

Term GPA	3.550	Term Totals	14.00	14.00	49.700
Cum GPA	3.565	Cum Totals	29.00	51.00	103.400

Term Honor: Dean's List
Academic Good Standing

Fall Semester 2021

Course	Description	Attempted	Earned	Grade	Points
HTH 100	PERSONAL WELLNESS	3.00	3.00	A	12.000
MATH 237	CALCULUS III	4.00	4.00	A-	14.800
PHYS 270	MODERN PHYSICS	3.00	3.00	A	12.000
PHYS 270L	MODERN PHYSICS LABORATORY	1.00	1.00	A	4.000
REL 101	RELIGIONS OF THE WORLD	3.00	3.00	A	12.000

Term GPA	3.914	Term Totals	14.00	14.00	54.800
Cum GPA	3.679	Cum Totals	43.00	65.00	158.200

Term Honor: President's List
Academic Good Standing

Spring Semester 2022

Course	Description	Attempted	Earned	Grade	Points
MATH 300	LINEAR ALGEBRA	3.00	0.00		0.000
MATH 336	ELEM DIFFERENTIAL EQUATIONS	3.00	0.00		0.000
MUS 203	MUSIC IN AMERICA	3.00	0.00		0.000
PHYS 247	DATA ACQUISITION & ANALYSIS II	1.00	0.00		0.000
PHYS 260	UNIVERSITY PHYSICS III	3.00	0.00		0.000

Term GPA	0.000	Term Totals	13.00	0.00	0.000
Cum GPA	3.679	Cum Totals	43.00	65.00	158.200

Undergraduate Career Totals

Cum GPA	3.679	Cum Totals	43.00	65.00	158.200
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Non-Course Milestones

Madison Research Essential Skills Test Proficient
Status: Completed

SULI PROGRAM APPLICATION RECOMMENDATION FOR ETHAN ALEXANDER ZIMMERMAN

Recommender Contact Information

- **First Name:** Kendra
- **Last Name:** Letchworth Weaver
- **Title:** Assistant Professor
- **Department:** Physics and Astronomy
- **Institution/Organization:** James Madison University
- **Telephone:** 540-568-6795
- **Email:** letchwkl@jmu.edu

Applicant Information

Association

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

I first came to know Ethan as a student in my introductory Python programming course for first year physics majors (Physics 105) in Fall 2020. In this course, Ethan learned the basics of writing software for scientific data analysis, including importing and exporting data from files, plotting, image analysis, declaring functions, and curve fitting. Despite the mostly online format of the course lectures, Ethan successfully completed all the programming assignments, receiving an 'A' and the second highest numerical score in the course. However, it was in my Modern Physics course (Physics 270) in Fall 2021 that he captured my attention and truly began to shine, receiving an 'A' and the top numerical score out of a class of 15 students. Though I have known Ethan only since August 2020, he has already impressed me with his intelligence, problem-solving skills, work ethic, persistence, and motivation to learn.

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.

In his Modern Physics coursework, Ethan demonstrated a deep curiosity about the material, an innate talent for solving challenging and complex problems, as well as a highly professional work ethic. In this class, we covered a large breadth of material from special relativity and introductory quantum mechanics to statistical physics and materials science, providing a first glimpse of advanced concepts which students will study again in upper level courses. Ethan asked a written question about the material in every single pre-lecture survey, and was the only student to do so this semester. Ethan was also the only student in the class to earn over 100 percent on the homework assignments – not only did he complete every assignment, including the extra credit problems, but he also demonstrated a deep understanding of the concepts through his clearly written and mathematically precise solutions. Furthermore, Ethan was paired with another student for in-class homework presentations, in which each team presents their solutions to a homework problem and provides additional commentary on the context of the problem, including technological applications and relevance to everyday life. Despite having an unreliable teammate who was late or absent for several of these presentations, Ethan was an excellent communicator, earning an average homework presentation score of 94 percent for his team.

For these reasons and more, I believe Ethan is one of the most promising students of the current second-year cohort of physics

majors at JMU. Based on my experience as an instructor and grader at Cornell University, I would also place him amongst the top 25 percent of second-year undergraduate physics students at an Ivy League institution. Ethan would excel as a SULI participant; he has significant potential for growth as a result of the unique mentorship and career-building opportunities he would experience in your program. Based on my experience mentoring SULI interns while I was an Aneesur Rahman postdoctoral fellow at Argonne National Laboratory, I feel confident that Ethan would discover a group of peers who match his intelligence and engagement.

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 ETHAN ALEXANDER ZIMMERMAN

Recommender Contact Information

- **First Name:** Taylor
- **Last Name:** Richardson-Cramer
- **Title:** NA
- **Department:** NA
- **Institution/Organization:** James Madison University Student
- **Telephone:** 540-391-5337
- **Email:** Richa3tc@dukes.jmu.edu

Applicant Information

Association

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

I have know Ethan Zimmerman for 9 years. We met in the 7th grade through our Middle School's Model United Nations Program. We maintained a close friendship throughout high school that included participating in both educational, extra curricular, and family activities. Ethan and I both applied to and were accepted to James Madison University where we chose to be room mates during our Freshman year. At the end of our Freshman year, we rented an off-campus apartment together where we currently reside. Ethan and I have traveled for multiple vacations together to the mountains of Virginia and beaches in North and South Carolina. We study together, discuss day-to-day life, prepare meals together, and have many mutual friends.

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.

Ethan Zimmerman is a highly reliable upstanding citizen. He is and has always been extremely dedicated to everything he puts his heart into since we were children. Ethan possesses unmatched academic skills and a drive not often found in ordinary people. His ability to spend countless hours working at his desk or behind his computer without ever losing his smile is physical proof that he does not give up. Ethan is relentless at accomplishing difficult tasks and achieving goals. He would be an ideal, decisive, and dedicated laboratory intern.

Ethan also possesses strong leadership skills that have evolved and grown in the 9 years that we have known each other. His critical thinking skills and rapid responses make have made him a natural and easily respected leader since an early age. Ethan and I participated in a robotics class together in the 7th grade. During a particularly challenging class project competition that required writing complex robotic code, he was able to oversee a group of students while editing the group's coding and perfecting his own which allowed the group to win the class completion. As long as we have known each other, Ethan has been continuously sought after to serve on teams in leadership positions. Myself and our peers constantly rely on and look to Ethan for help and guidance. People naturally gravitate towards his high spirits and efficient administration of tasks.

Since living together at James Madison, watching Ethan is like watching a movie. I am constantly watching his work and interactions with fascination. His friends, fellow students, and those who know him expect him to do great things. He is more than capable of finding ways to save this planet and its people. He is also more than capable of being one of the best research interns in the entire program.

Emotionless words on paper and my voice alone will never be enough to describe or put into an accurate picture of the type of person Ethan is. He is an exceptional intellectual student and a natural leader as evidenced by his grades and position on the Dean’s. To honestly know and see what everyone else sees in Ethan, you must talk to him. No matter what your perception or held standing of him is, one conversation with him will have you rating your hopes and dreams on his shoulders as well. With all this said, Ethan Zimmerman would be a perfect candidate for your program. As his friend, I sincerely look forward to watching the important things he will accomplish. Ethan is a bright, compassionate, kind, intelligent, dedicated person that will do extremely well performing research on DOE projects that help further the Department’s mission.

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