

Atlas Vernier

1735 Donlee Drive, Blacksburg, VA 24060

Mobile: +1 804-980-4145

Email: atlas@vt.edu

Citizenship: United States of America

Special Hiring Authority: N/A

Veterans' Preference: N/A

OBJECTIVE

Accomplished, adaptable, and motivated technologist looking for an engaging and dynamic position to contribute skills in transdisciplinary workflows, international collaboration, systems thinking, and continual learning.

WORK EXPERIENCE

Graduate Assistant

Institute for Creativity, Arts, and Technology

190 Alumni Mall

Blacksburg, VA

Supervisor: Tanner Upthegrove (540-529-9047)

(May Contact)

May 2023 – present

20 hours per week

- Exploring transdisciplinary modalities of data collection, artistic expression, and technological development while supporting internal and external collaboration.
- Developing educational structure and workflows for transdisciplinary pedagogical experiences for students engaged with the Engineering Education program, as well as faculty and staff seeking new technological integrations for research and development.

Graduate Research Assistant

Human IMPAC-T Lab

540 Whittemore Hall

1135 Perry Street

Blacksburg, VA

Supervisor: Dr. Rafael N.C. Patrick (540-231-2788)

(May Contact)

May 2023 – present

15 hours per week

- Developing system-wide solutions, workflows, and resources for transdisciplinary education, research, and recruitment in virtual and physical collaborations.
- Determining the full technological capabilities and requisite resources needed to implement university-wide systems for extended reality use in pedagogy, research, and recruitment.
- Empowering large-scale digital transformation with emphasis on immersive technologies

Researcher & Technologist

Aug 2021 – May 2023

Applied Research in Immersive Experiences & Simulation

15 hours per week

560 Drillfield Drive

Blacksburg, VA

Supervisor: Dr. Todd Ogle (540-231-1188)

(May Contact)

- Utilizing motion capture and photogrammetry data to develop immersive and interactive augmented and virtual reality experiences and displays.
- Creating documentation and video tutorials to record progress throughout development and to create a greater knowledge base for future developers, which will ultimately be used for public training through the University Library's Virtual Environment Studio
- Designing engaging educational experiences for K-12 students to fulfill the Virginia Standards of Learning in collaboration with the Science Museum of Southwestern Virginia.

Researcher & Technical Writer

Oct 2022 – May 2023

Human IMPAC-T Lab

10 hours per week

540 Whittemore Hall

1135 Perry Street

Blacksburg, VA

Supervisor: Dr. Rafael N.C. Patrick (540-231-2788)

(May Contact)

- Developed solutions for interdisciplinary collaboration in virtual environments using immersive tools such as virtual reality, extended reality, spatialized audio, and multimodal virtual and physical interactions.
- Designed, planned, and performed research experiments for presentation and publication at conferences across the United States.
- Utilized virtual reality to overcome socioeconomic, geographical, and accessibility barriers for incoming students to create a multifaceted and collaborative educational experience.
- Engaged with underserved and underrepresented populations to determine and meet their informational needs about higher education.

Communications & Design Specialist

Nov 2018 – Oct 2022

Field and Space Experimental Robotics Laboratory

20 hours per week

310 Goodwin Hall

635 Prices Fork Road

Blacksburg, VA

Supervisor: Dr. Erik Komendera (540-231-7192)

(May Contact)

- Managed multiple teams of students and projects as an internal project manager while overseeing objectives, key results, and key performance indicators for each sub-team.

- Successfully transitioned the FASER Lab to a new organizational structure to encourage student participation, autonomy, and initiative.
- Created external outreach connections, foundational media presence, and connection opportunities for graduating students.
- Edited and reviewed technical papers on designs and potential applications for publication, competitions, and funding opportunities.

Digital Transformation Rapid Development Team

Aug 2019 – Jan 2020

NASA Langley Research Center

20 hours per week

1 NASA Drive

Hampton, VA

Supervisor: Ed McLarney (757-775-2961)

(May Contact)

- Developed interactive and reactive visual technology for a transformative display in the Langley Headquarters building.
- Designed digital twin of the Katherine G. Johnson Computational Research Facility.
- Integrated cloud management for the VR CAD Repository (Summer 2019) with variable permissions for multiple levels of security within the repository.
- Continued integration of augmented and virtual reality into existing engineering workflows.

Digital Transformation Rapid Development Team Intern

June 2019 – Aug 2019

NASA Langley Research Center

40 hours per week

1 NASA Drive

Hampton, VA

Supervisor: Ed McLarney (757-775-2961)

(May Contact)

- Collaborated with the IDC² (formerly the Engineering Design Studio) to develop demonstrations and applications propelling the limits of what is possible using augmented and virtual reality at NASA Langley Research Center.
- Developed the Augmented Reality & Virtual Reality Integrated System (ARVRIS) for multi-user, multimodal model manipulation in a virtual environment.
- Designed the user interface and overlay elements for the Shackleton Crater Heads-Up Display intended for lunar navigation at the Shackleton Crater.
- Demonstrated and explained a five-dimensional data display in virtual reality, proving the use case for extended reality as a tool for data visualization.
- Created the VR CAD Repository as a center-wide database for 3D models (SBU and ITAR compliant) for AR/VR development, design reviews, visualization, and simulation.
- Utilized emerging technologies for integration into existing engineering workflows.

**Office of the Chief Information Officer Intern
NASA Langley Research Center**

1 NASA Drive
Hampton, VA

Supervisor: Ed McLarney (757-775-2961)
(May Contact)

June 2018 – Aug 2018
40 hours per week

- Created 3D models for use in augmented and virtual reality development and integration.
- Began internal outreach at LaRC to source models to populate the VR CAD Repository developed in 2019.

**Office of the Chief Information Officer Intern
NASA Langley Research Center**

1 NASA Drive
Hampton, VA

Supervisor: Ed McLarney (757-775-2961)
(May Contact)

June 2017 – July 2017
40 hours per week

- Created 3D models for the virtual reality model of the medical center of the Mars habitat to train doctors using simulated surgeries in new and variable environments.
- Began working with the Multiuser Modal Manipulation Tool, which was the predecessor to ARVRIS developed in 2019.

EDUCATION

Master of Science – Industrial & Systems Engineering
Concentration: Human Factors & Ergonomics Engineering
Virginia Polytechnic Institute & State University
Blacksburg, VA

Expected May 2025

Bachelor of Science – Industrial & Systems Engineering
Virginia Polytechnic Institute & State University
Blacksburg, VA

May 2023
Overall GPA: 3.37
In-Major GPA: 3.43

Bachelor of Arts – Foreign Languages – French
Virginia Polytechnic Institute & State University
Blacksburg, VA

May 2023
Overall GPA: 3.37
In-Major GPA: 3.79

VOLUNTEER & COMMUNITY SERVICE

Administrator & Community Moderator

Aug 2021 – present

The Writer's Block

10 hours per week

Virtual

Supervisor: Atlas Vernier (804-980-4145)

(May Contact)

- Fostering an attitude of continual improvement in a community of over 1,500 writers by creating a welcoming virtual environment where writers can develop their skills and style while receiving technical and creative feedback from experienced writers and editors.
- Empowering an international team by establishing best practices and operating procedures to encourage staff autonomy as needed due to the 24/7 nature of the community at large.
- Overseeing and hiring personnel as needed to ensure that at least one member of staff can take action at any given time, regardless of time or time zone.
- Organizing events to present new and engaging approaches to technical and creative writing while encouraging healthy competition between writers as individuals and teams.

Post-Production Manager; Translation & Subtitling Lead

July 2021 – present

Symphony: The Animated Series

5 hours per week

Virtual

Supervisor: Katherine Liao (symphony.tas@gmail.com)

(May Contact)

- Establishing an effective overarching workflow that is compatible with international teams, work styles, and cultures for over 30 editors, audio engineers, continuity specialists, translators, and foley artists.
- Communicating with other departments to ensure that the series is visually and auditorily cohesive with itself and with the emotions evoked by artists and writers.
- Designing a process to optimize the subtitling and translation process to transmit the same message across multiple languages.

Senior Staff Assistant

Aug 2023 – present

The Marching Virginians

10 hours per week

821 Southgate Drive

Blacksburg, VA

Supervisor: Dr. Polly Middleton (540-231-8497)

(May Contact)

- Facilitating the band's activity by providing additional administrative and on-field support to rank captains and band faculty members.
- Managing logistics for organization and movement of 330-member band between Virginia Tech Athletics, performance centers, local businesses, and band personnel.
- Serving as a resource for current and incoming leadership based on previous experience as a rank captain and long-standing member of the Marching Virginians.

**Rank Captain
The Marching Virginians**

821 Southgate Drive
Blacksburg, VA

Supervisor: Dr. Polly Middleton (540-231-8497)
(May Contact)

Aug 2021 – May 2023
20 hours per week

- Led daily rehearsals to meet and exceed the high standards of the Marching Virginians.
- Ensured that each member was prepared with new drill and music for both rehearsals and performances, with new music and marching structure each week.
- Established cohesive and effective communication between upper leadership and individual leadership to prepare for rehearsal, performances, and parades.

**French Translator
Critical Role Translates**

Virtual

Supervisor: Kali Bertrand
(May Not Contact)

July 2019 – July 2022
20 hours per week

- Served as a community translator for an international broadcast and recordings with over 595,000,000 views on a team translating to 32 total languages.
- Translated English to French to ensure comprehension by an international audience including verb tenses, context, and jokes that may not be able to be translated directly.

**Director of Corporate Relations
Institute of Industrial & Systems Engineers**

1145 Perry Street
Blacksburg, VA

Supervisor: Dr. Eileen Van Aken
(May Not Contact)

April 2021 – May 2022
10 hours per week

- Established and maintained corporate and alumni relationship networks.
- Planned and coordinated corporate networking receptions and information sessions.

**Citizen Science Leadership Team
Orion Sciences Living Learning Community**

590 Washington Street SW
Blacksburg, VA

Supervisor: Lori Blanc
(May Not Contact)

March 2019 – May 2020
15 hours per week

- Designed personalized science projects to encourage pedagogical development for teams of first-year students in order to develop communication, presentation, and writing skills.
- Led workshops to further improve specialized skills with technical writing, 3D modeling, electronics, and programming approaches.

**Moon to Mars Ice & Prospecting Challenge Participant
NASA RASC-AL Special Edition**

Dec 2018 – June 2019
5 hours per week

1 Langley Drive
Hampton, VA

Supervisor: Dr. Erik Komendera (540-231-7192)
(May Contact)

- Communicated design and operational plan with judges, teams, and NASA employees.
- Created CAD for multiple iterations of the Overburden Layer Ice to Vapor Extracting Robot (OLIVER) and contributed to technical competition writing and presentation.

SUMMARY OF SKILLS

Leadership

Transdisciplinary Workflows
International Organization
Integration & Implementation
Project Management
Workflow Development
Systems Thinking

Software

Autodesk Inventor
Autodesk AutoCAD
DS Solidworks
Microsoft Office
Google Suite
Adobe Premiere

Skills

Grant & Proposal Writing
Presentation
Communication
Leadership
Administration
Translation

JOB-RELATED TRAINING

- Collaborative Institutional Training Initiative: Social & Behavioral Research
- Collaborative Institutional Training Initiative: Basic Responsible Conduct of Research
- Autodesk Certified Professional
- Autodesk Certified User
- Certiport Testing Center Administrator
- Certiport Certified Proctor

LANGUAGE SKILLS

English

Spoken: Advanced
Written: Advanced
Read: Advanced

French

Spoken: Advanced
Written: Advanced
Read: Advanced