# Logan Lane

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Website:

https://github.com/LoganLane

## Summary

- Second year PhD student at Virginia Tech researching advanced collaboration systems using AR/VR technologies
- Prior experience managing diverse students on various projects while an undergraduate student
- Utilized Unity and C# to develop immersive prototypes for future research projects
- Currently planning user studies to be published at future immersive technology research conferences
- Previous experience developing mobile applications using Xcode, UIKit, and Swift

## EDUCATION

Virginia Tech Blacksburg, VA, USA

Ph.D. in Computer Science and Applications advised by Doug A. Bowman - 3.8/4.0 GPA

Aug. 2021–Current

#### University of Virginia's College at Wise

B.S. in Management and Information Systems - 3.4/4.0 GPA

Wise, VA, USA May. 2018–May 2021

## EXPERIENCE

Virginia Tech Blacksburg, VA, USA

Graduate Teaching Assistant

Aug. 2021-Current

- Provided assistance to over 200 undergraduate students during scheduled office hours for Professionalism in Computing and Introduction to Database Management courses
- Collaborated with professor and other teaching assistants to grade coursework throughout the semester

Virginia Tech

Blacksburg, VA, USA

Graduate Research Assistant

May. 2022–Aug. 2022

- Conducted research under supervision of Doug A. Bowman regarding a remote, simulated augmented reality collaboration system for the Meta Quest
- Generated prototype applications using C# and Unity technologies

#### University of Virginia

Remote

ACCORD Intern

May. 2020—Jul. 2021

- Co-founded DevHub@Wise, a student software development community
- Worked as project lead of InAttendance, an attendance app for the UVA Wise campus built using Swift
- Collaborated with UVA administration and other interns to develop grant proposal for over \$40,000 of DevHub@Wise funding

#### University of Virginia's College at Wise - Student Support Services

Wise, VA

Transfer Student Mentor

May. 2019-May. 2021

 Assisted incoming UVA Wise transfer students by holding office hours to discuss issues in the classroom, schedule tutoring hours, and emailing weekly updates to students - Hosted workshops and networking opportunities for students throughout the semester

#### **SWCC** Upward Bound

Instructor & Teaching Assistant

Cedar Bluff, VA May. 2017–July. 2019

- Taught Raspberry Pi/Linux & Algebra 1 class to high school students
- Assisted other instructors by preparing class materials and assisting with other day-to-day needs

## SKILLS

- Programming Languages: C++, C#, Swift, Python, SQL, Kotlin
- Development Tools: Unity 3D, Git, Xcode, Android Studio

### Projects

# PlayStation VR Trophy Room (2022)

Developed a Unity program that allows users to interact with their PlayStation trophy collection in VR

# Remote Collaboration System for Meta Quest 2 (2022)

Developed a remote, simulated augmented reality collaboration system for the Meta Quest 2

# Virtual Loupes Augmented Reality Microsurgery Aid (2022)

Extended functionality of existing virtual loupes prototype by porting software to the Varjo XR3

# A Digital Twin Based Approach to Smart Lighting Design (2022)

Developed methods and techniques to support smart lighting design in an immersive virtual reality experience TweetCSVAnnotator (2021)

Developed utility to rapidly annotate CSV entries for hate-speech detection algorithm using Swift

## **PUBLICATIONS**

- [1] J. Thomas, S. W. Lee, A. Giovannelli, **L. Lane**, and D. Bowman, A communication-focused framework for understanding immersive collaboration experiences, 2023.
- [2] E. Mohammadrezaei, A. Giovannelli, **L. Lane**, and D. Gračanin, "A digital twin based approach to smart lighting design", in 2022 Winter Simulation Conference (WSC), 2022.

#### Scholarships and Awards

UVA Wise Unsung Hero Award
 TICE Total Achievement Award
 Dr. Anne Crum Student Leadership Award
 2020