Jack Schwanewede

551-238-0400 | jaschwanewede@davidson.edu | linkedin.com/in/jack-schwanewede

EDUCATION

Davidson College Davidson, NC
Bachelor of Science in Cognitive Science, Minor in Data Science *Expected May 2026*
- **GPA:** 3.955 | **Relevant Coursework:** Data Visualization, Machine Learning, Database Programming, Deep Learning, Research Design & Statistics, Data Structures, Linear Algebra, Cognitive Psychology, Perception & Attention

University College London London, UK
Psychology Affiliate Student *Sep. – Dec. 2024*
- **Coursework:** Topics in Computational Cognitive Neuroscience, Brain and Behaviour, One-Term Research Project (Solomon Lab), Psychology Affiliate Seminar

RESEARCH EXPERIENCE

Data Engineer and Research Advisor May 2025 – Present
Davidson VGSocLab *Davidson, NC*
- Scraping, cleaning and analyzing data to build dataset on video game characters using Python, Beautiful Soup
- Advising and developing research projects, qualitative coding, and preparing manuscripts

Computer Science/Virtual Reality Researcher May 2024 – Present
Davidson Research in Immersive Virtual Environments *Davidson, NC*
- Develop and program experimental programs in Virtual and Mixed Reality using C# and Unity
- Conduct experiments, run participants, collect and analyze result data using R
- Authoring manuscripts on cognitive performance and environments VR alongside Dr. Tabitha Peck, published in *IEEE TVCG* and additional paper under review

Virtual Reality Research Assistant Sep. – Dec. 2024
University College London Dept. of Visual Neuroscience *London, UK*
- Redesigned VR experiments on top-down perception and agency using C#, Unity
- Critically assessed previous cognitive research to refine existing experiments
- Collaborated with UCL's Solomon Lab to reach research objectives and maximize results

OTHER EXPERIENCE

Data Science Consultant and Tutor Aug. 2025 – Present
Data CATS - John Crosland Jr. Center for Teaching and Learning *Davidson, NC*
- Tutoring/providing assistance to students in Data Science, Economics, Computer Science, Mathematics and other classes
- Advising students and debugging using Statistics and Programming languages such as R, SQL, Python, etc.
- Building projects/applications for Davidson College Relations, Oracle Apex/SQL

Data Engineer and Analyst May 2025 – Present
Cats Stats Sports Analytics *Davidson, NC*
- Analyzing/scouting team statistics, developing applications for Davidson College Athletics Department
- Built Field Hockey Corner Shot Application using HTML/JS/CSS, streamlined into scouting analysis
- Consulting with coaches to improve results and target goals, delivering and presenting projects

Humanities Fellow Aug. 2023 – May 2024
Davidson College Humanities Program *Davidson, NC*
- Led tutoring sessions twice a week to assist students with assigned material
- Guided students through class assignments and papers
- Provided technical design advice for student portfolios utilizing WordPress

PUBLICATIONS

J. A. Schwanewede, A. D. Bond and T. C. Peck, "Clean Up Your Lab: The Impact of Technology Clutter and Replica Environments on Cognitive Performance," Under Review at *IEEE Virtual Reality 2026*.

J. A. Schwanewede, A. A. Guth and T. C. Peck, "The Impact of Environment Design Bias on Working Memory," in *IEEE Transactions on Visualization and Computer Graphics*, vol. 31, no. 5, pp. 2933-2942, May 2025.

PRESENTATIONS

J. Schwanewede, "Design Bias in VR: Impact of Real/Virtual Spaces on Attention and Cognition," presented at Davidson Math/Computer Science Coffee Talk, Davidson, NC, Sep. 2025.

J. A. Schwanewede, A. D. Bond and T. C. Peck, "Attention, Cognition, and Learning in Real and Virtual Spaces," presented at Davidson College Fall Research and Creative Works Symposium, Davidson, NC, Sep. 2025.

E. Anglin, M. Hamer, **J. Schwanewede**, I. Thomas and C. Whelchel, "Impact of Induced Mood on Emotion Recognition and Reaction Time for 'Faces' in Inanimate Objects (Face Pareidolia)," presented at Davidson College Verna Miller Case Symposium, Davidson, NC, May 2025.

J. A. Schwanewede, A. A. Guth and T. C. Peck, "The Impact of Environment Design Bias on Working Memory," presented at *IEEE Virtual Reality 2025*, Saint-Malo, France, March 2025.

PROJECTS

Field Hockey Corner Analyzer | *HTML, JavaScript, CSS*   June – Aug. 2025
- Built web application using HTML, JavaScript and CSS used to track field hockey corner plays
- Used by Davidson Women's Field Hockey team and staff to analyze play outcomes and scout opponents
- Improved corner play-calling and defense, best record in 15 years in season after implementation

Video Game Network Graph | *HTML, JavaScript, CSS*   April – May 2025
- Visualized network graph of *Super Smash Bros. Ultimate* crossovers
- Integrated interactive elements into visualization, allowing users to customize experience

NBA *2K* Rating and All-Star Predictive Model | *Python, PyTorch, LaTeX*   April – May 2025
- Built multi-task Deep Learning model to predict NBA *2K* Rating and Season Awards
- Trained models on NBA season statistics
- Presented exploration on dataset and methodologies to build model, detailed in written paper

Media in the Future – Humanities Portfolio | *WordPress*   Aug. 2022 – May 2023
- Year-long Humanities portfolio housing written works, creative works
- Analyzed the impacts of technology and multi-media on culture and entertainment

TECHNICAL SKILLS

Languages: Python, Java, C#, R, SQL, Stata JavaScript, HTML/CSS
Libraries/Frameworks: NumPy, pandas, PyTorch, JAX, d3.js, Beautiful Soup, jamovi
Tools/Software: Unity, Blender, LaTeX, WordPress, VS Code, Visual Studio

AWARDS/HONORS

Davidson Research Initiative Grant (2025) - $7,000

INVOLVEMENT/ACTIVITIES

Lead Programming Chair   January 2024 – Present
Davidson Games Club   *Davidson, NC*
- Coordinate and run social events for groups of 50+
- Card game, board game and video game events
- Strengthen club and community attendance, weekly meetings and events

Bass Guitarist   April 2023 – Present
WALT 1610 Radio   *Davidson, NC*
- Perform in several student bands

- Rehearse weekly, work shopping cover and original songs

Principal Double Bassist   August 2022 – Present

Davidson College Symphony Orchestra   *Davidson, NC*

- Attend two weekly rehearsals for 3 $\frac{1}{2}$ hours a week
- Practice repertoire outside of rehearsal time
- Perform in 10+ concerts annually