Josh Wade

Research Scientist, Entrepreneur, Software Developer.

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Versatile developer with 10 years of experience in software and research with strong technical and entrepreneurial experience and a passion for data science and machine learning. Business owner and operator experienced in fundraising, budgeting, payroll, and accounting. Attentive manager with working experience managing teams across software development and clinical research. Well-versed in software development life cycles and applied machine learning, with a background spanning assembled, compiled, and interpreted programming languages, as well as embedded systems and virtual reality.

Skills

Empirical Research	Project Management
Machine Learning	Academic/Grant Writing
Statistical Analysis	Software Development

Work History

01/2017 - Current

Co-founder & CEO
Adaptive Technology Consulting, LLC, Murfreesboro, TN

- Led development and validation of digital platform for robust early screening of Autism Spectrum Disorder in toddlers
- Managed all project operations of federally-funded grant ($1.2 million)
- Conducted >70 customer discovery interviews with pediatric healthcare providers

10/2020 - Current

Project Manager
Vanderbilt University, Nashville, TN

- Managed team of >10 of engineers and doctoral students using Scrum.
- Worked closely with interdisciplinary team of researchers comprised of organizational scientists, clinical psychologists, and implementation scientists.
- Served as co-PI on Microsoft-funded project (>$150,000)

01/2016 – 09/2020

Research Assistant II
Vanderbilt University, Nashville, TN

- Created 4 distinct software products and led team of >10 engineers and

doctoral students in parallel software development efforts under direction of PI (Nilanjan Sarkar).
- Led as Co-PI on project funded by Microsoft ($100,000).
- Served as Project Coordinator on project funded by National Science Foundation ($1,000,000).

08/2013 – 12/2015   ### Research Assistant I

Vanderbilt University, Nashville, TN

- Managed and conducted human subjects testing under direction of PI (Nilanjan Sarkar), resulting in >100 successful experiments.
- Created software applications spanning Virtual Reality, Machine Learning, and Embedded Systems.

09/2012 – 07/2013   ### Undergraduate Intern

Vanderbilt University, Nashville, TN

- Implemented core software modules of Virtual Reality-based driving simulator designed to provide individualized training for autistic drivers (C#).
- Integrated eye tracker in simulator using TCP/IP with high-frequency data transmission.

Education

08/2013 – 12/2015   ### Master of Science: Computer Science

Vanderbilt University - Nashville, TN

Research areas: VR, Machine Learning, Embedded Systems, Autism Spectrum Disorder, Mobility Aid Instrumentation

Selected Coursework: Machine Learning, Artificial Intelligence, Distributed Systems Principles, Foundations of Hybrid & Embedded Systems, Cyber Physical Systems, Wireless Mechatronics, Human-Computer Interaction

08/2009 – 08/2013   ### Bachelor of Science: Computer Science

Middle Tennessee State University - Murfreesboro, TN

Research areas: VR, Graph Theory, Autism Spectrum Disorder

Selected Coursework: Parallel Processing, Assembly Language, Linear Algebra

Accomplishments

- Raised >$1.3 million to lead development of production-ready web application for early identification of autism in toddlers (clinical validation underway).
- Implemented Virtual-Reality based driving simulator, resulting in commercial licensing agreement with Delaware-based business.
- Secured patent protection on novel walking aid system that automatically quantifies attributes regarding users' functional mobility.

- Work showcased by national media outlets including CBS 60 Minutes, NBC News, Autism Speaks, and more.

Affiliations

Association for Computing Machinery, Member
Frist Center for Autism and Innovation, Fellow

Languages

C#

Python

C++

Java

Software

Scikit-learn	Matplotlib
Jupyter Notebooks	Azure Cognitive Services
WEKA	MedCalc Statistical Software
Numpy	Unity Game Engine

Interests

Quantum Computing

Blockchain/Distributed Ledger Technology