TERRELL KENDALL GLENN, PH.D.

Hardware Engineer II – Strategic Planning & Architecture

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EXECUTIVE SUMMARY

Multifaceted engineer pursuing a new opportunity within the user experience (UX) realm to advance my career. I possess a **comprehensive background in conducting qualitative and quantitative research, project management, data analysis, product design and development and working with key cross-functional and multi-disciplinary stakeholders to execute strategic planning.** I am confident that my stellar problem-solving, leadership, project management, communication, relationship building, and analytical skills, as well as my ability to translate research findings into strategic narratives, will validate my qualifications for this professional opportunity.

EXPERTISE

- Infrastructure Planning
- Product Design & Development
- Artificial Intelligence (AI)
- Project Management
- Research Methods
- Quantitative and Qualitative Data Analysis

Technical Skills:

R, C#, C, JavaScript, C++, Unity 3D, Unreal Engine, MATLAB, Python, Figma, CAD, & High-Performance Computing

-Autodesk Suite

-MS Office Suite

Intermediate German

EDUCATION

Doctor of Philosophy (Ph.D.), Mechanical Engineering (Human-Computer Interaction)

Thesis: Empowering Youth to Design, Build and Play Through Interactions with Augmented Reality, Physical Prototyping and the Internet of Things

GPA: 3.62/4.00

Purdue University

Bachelor of Science (B.S.), Physics

GPA: 3.66/4.00

Morehouse College

PROFESSIONAL EXPERIENCE

Hardware Engineer II – Strategic Planning & Architecture

Microsoft Corporation, Redmond, WA | May 2022 – Present

• **Lead infrastructure planning with a 5-6 year outlook (i.e., power, cooling, networking, etc.) for 15 nationwide data centers that support leading clients such as OpenAI.**

• Partner with key internal stakeholders within supply chain management, engineering (mechanical, thermal and electrical), strategic planning, and technical program management to execute product development based on customer/end-user requirements.

• **Create roadmaps, analyze artificial intelligence (AI) workloads, analyze program requirements, gather requirements, and align technology with end-user expectations.**

• **Analyze key performance indicators (KPIs)/metrics** related to total cost of ownership (TCO) which include but are not limited to server lifecycle, Capex/OpEx costs, and product recycling.

• **Lead quarterly competitive intelligence infrastructure analysis & update senior leadership**; identify, evaluate and analyze new emerging technology within power, cooling, networking, and rack structure at key competitors such as Meta, AWS, Google and Nvidia.

• **Gather insights/market research** from external sources including Data Center Dynamics and Semi Analysis, as well as internal sources such as sourcing/supply chain management, to identify competitor trends.

• **Strong project management skills**; lead planning meetings, create agendas, manage relationships with key stakeholders, and create schedules for the product development timeline.

• Proven ability to work on a hybrid basis while exceeding performance expectations.

Key Highlights, Projects & Accomplishments:

• Vertical Power Delivery: Currently collaborating with a team of technical stakeholders within supply chain, engineering, planning and sourcing to develop a proof of concept to deploy power delivery technology for future AI workloads; this project is expected to improve power delivery efficiency by ~12% (ongoing, results pending).

• Data Center – Security Control Module (DC–SCM): Utilizing the latest DC-SCM standards/best practices from the Open Compute Project (OCP) to determine the necessity/value analysis of deploying a new DC-SCM versus retaining the legacy DC–SCM.

- A proposed deployment of a new DC-SCM would deliver an expected 1% TCO decrease.

•Standalone Rack-SCM: Collaborated with a team of technical stakeholders within supply chain, engineering, planning and sourcing to develop a next-gen rack management solution affecting ~9.2% of first-party racks.

Product Design Consultant, *Flare Tech: Laser & Design LLC, Redmond, WA | January 2020 – Present*

• **Lead the design and development of hand-crafted items for small businesses and individual customers using raw materials including but not limited to acrylic, wood, paper, metal, glass and foam.**

• **Utilize AutoDesk Inventor and Adobe Creative Suite** (i.e., Illustrator and Photoshop) and Silhouette Studio to create prototypes and products for customers.

• Strong expertise in product development, project management, laser cutting, fabrication consultation and time management.

Key Highlights, Projects & Accomplishments:

• **Created 10 award plaques for Alpha Phi Alpha Fraternity Inc.'s Indiana District Conference in 2022**, as well as conference gifts for 150+ attendees.

TERRELL KENDALL GLENN'S RÉSUMÉ (PAGE 2)

Graduate Research Assistant, ***Purdue University,*** *West Lafayette, IN | August 2016 – June 2022*

• **Conducted quantitative and qualitative research with an emphasis on developing Augmented Reality (AR) and Internet of Things (IoT) technologies for youth aged 12-18.**

• Performed studies on 150+ youth and spearheaded a new technology, an end-to-end system in which study participants were able to design and program interactions between digital content and electromechanical devices.

• **Served as a Summer Project** Coordinator in the summers of 2020, 2021 and 2022 as part of the Purdue Minority Engineering Program.

• **Served as Lead Instructor for the Gifted Education Research & Resource Institute from June 2017 – May 2020**; designed and implemented a series of two-week **Smart Toys & Robots** workshops geared towards Middle and High School Students.

Software Engineering, ***Intel Corporation,*** *Santa Clara, CA | Summer 2016*

• **Utilized Intel's newest chip (Skylake) to develop various computer configurations based on customer requirements to test product workloads; key clients included but were not limited to Apple Dell, AutoDesk, HP.**

• Measured Computer Processing Unit (CPU) and Graphical Processing Unit (GPU) performance to drive future product design at Intel.

• Analyzed performance metrics, investigated adjustable parameters provided by customers, and modeled product performance.

• Identified the next generation of workloads on which Intel's newest products must excel to be successful.

• **Experience in using "R" programming language** to execute data analysis to create reports which were sent to clients for additional review.

PUBLICATIONS

• Anaya Ipsita, **Terrell Glenn**, Disha Bhagwat, Nielsen Pereira, Kylie Peppler, and Karthik Ramani. 2025. Adopting Backward Design into a Constructionist Curriculum Design for IoT Skill Development in High Schoolers. Adjunct Proceedings of the 2025 CHI Conference on Human Factors in Computing Systems. Association for Computing Machinery, Paper Link: https://tinyurl.com/45zf6kxp

• **Terrell Glenn**, Ananya Ipsita, Caleb Carithers, Kylie Peppler, and Karthik Ramani. 2020. StoryMakAR: Bringing Stories to Life With an Augmented Reality & Physical Prototyping Toolkit for Youth. 2020 CHI Conference on Human Factors in Computing Systems. Association for Computing Machinery, Paper Link: https://tinyurl.com/mtdhear4

• Karthik Ramani, **Terrell Glenn**, Caleb Carithers, Ananya Ipsita. 2022. System and method for authoring augmented reality storytelling experiences incorporating interactive physical components. US Patent # US11468650B2.

• Yuanzhi Cao, Zhuangying Xu, **Terrell Glenn**, Ke Huo, and Karthik Ramani. 2018. Ani-Bot: A Modular Robotics System Supporting Creation, Tweaking, and Usage with Mixed-Reality Interactions. 12th International Conference on Tangible, Embedded, and Embodied Interaction. Association for Computing Machinery, Paper Link: https://tinyurl.com/29bhsck8

• Temitope Adeoye, Myson Burch, **Terrell Glenn**, Rachel Scarlett, De'Shovon M. Shenault. 2021. Mentoring Black Teens During National Pandemics: Mutually Beneficial Service. Purdue Journal of Service-Learning & International Engagement, Paper Link: https://tinyurl.com/yy25xan2

PROFESSIONAL AFFILIATIONS & INVOLVEMENT

Member, Alpha Phi Alpha Fraternity, Inc., 2017 – Present

- **Initiated via the Iota Lambda Chapter in Indianapolis, IN in November 2017**; Served as the STEAM Committee chairman to lead workshops for local youth aged 12-18 and prepare them for STEAM fair presentations
- **Current member of the Zeta Pi Lambda Chapter in Seattle, WA**; Serve as a Board Member for the Seattle Alphas Education Foundation and the Director of Education for the Zeta Pi Lambda Chapter

Member, National Society of Black Engineers (NSBE), 2013 – Present

FELLOWSHIPS

The National Science Foundation Graduate Research Fellowship Program

The National GEM Consortium (Sponsor: Intel Corporation)