

AARON BROOKS

SENIOR TECHNICAL LEADER

425.512.7181

BROOKS.AARONPATRICK@GMAIL.COM

SNOHOMISH, WA

[Portfolio](#)

PROFESSIONAL SUMMARY

Veteran technical leader with a proven record of guiding multidisciplinary teams through fast paced production environments — owner of simulation and platform integration for one of gaming's most celebrated franchises.

SKILLS & ABILITIES

- Natural problem solver with focus on core objectives and resource capabilities to drive streamlined solutions.
- Human-centered designer focused on interaction, motivation, and perceptual impact.
- Multidisciplinary innovator bridging theory and practice through hands-on expertise in diverse domains.
- Relentlessly curious and self-directed learner, driven by research, experimentation, and continuous growth.

EXPERIENCE

May 2011 – July 2025, Senior Physics Design Lead, Microsoft – Turn 10 Studios

- Owner of the Forza Motorsport simulation engine architecture and roadmap.
- Team leader for a multidisciplinary group of computer science engineers, physicists and designers. Aligned team efforts with market research and competitive analysis for a clear path toward technical excellence.
- Design engineer for all physics systems including vehicle dynamics, tire modeling, input, user assists, haptics and feedback systems. Led the development of dozens of advancements in these areas and others.
- Defined Xbox hardware, platform and API requirements in partnership with Xbox Platform and Device teams as well as third party vendors including Logitech and Thrustmaster. Guided platform input device integration across the Xbox ecosystem generating more than \$5M in license revenue annually for more than a decade.
- Championed inclusive design as a founding member of the Accessibility Leadership team and delivered assistive solutions for diverse player needs.

March 2008 – May 2011, Vehicle Production Lead, Microsoft – Turn 10 Studios

- Led the design and evolution of "Automagic," a scalable, automated, SQL-based car processing pipeline designed to build a vehicle simulation model from publicly available research data by leveraging known-good engineering data and dynamic outputs from a small number of vehicles.
- Managed an 8 person research team in the compilation of 270,000 verified data points across 1,500 vehicles.
- Established data standards and calculation methods for all data points which continue to be used today.
- Personally developed Excel, T-SQL and batch script toolsets to simplify calculations and reduce repetition.

January 2018 – July 2021, Technical Director, Ranger Road (501c3), Volunteer

- Directed the racing division of a wounded veteran focused nonprofit; engineered adaptive solutions for shared car endurance racing across varied driver skills and abilities.
- Managed vehicle preparation, logistics, safety coordination, and event comms for six annual West Coast races.
- Coached veterans and first responders with disabilities in performance driving, vehicle maintenance and race strategy.

EDUCATION

- Associate of Science Mechanical Engineering – Everett Community College, 2001

PROFESSIONAL ACCOLADES – DIRECT CONTRIBUTION

- Best Simulation - Forza Motorsport 6, Gamescom 2015
- Innovation in Accessibility - Forza Motorsport (2023), The Game Awards 2023
- “Forza Motorsport Feels So Damn Good.” – Forza Motorsport (2023), Kotaku review headline.

PERSONAL ACCOLADES, HOBBIES AND INTERESTS

Mentorship & Competitive Racing

- Nationally competitive RC car racer, team manager, track director and product designer.
 - Internationally recognized mentor in engineering, driving, philosophy and personal growth.
 - Analyzed exit points and rapid growth areas in the hobby. Normalized behavior among local racers to target these areas resulting in some of the strongest onboarding and highest event entry counts nationally.
 - Established a mentor-based team structure empowering team members to educate those below and ask those above. Emphasized teaching over doing to promote sustainable growth.
 - Design engineering consultant to multiple hobby brands with several designs carried from concept to highly regarded product.
 - Achieved this level of influence in less than 4 years in the hobby.
- Road racer and driving coach; annually host performance and teen driving schools to promote skill development and driver safety.

Technical Hobbies and Fabrication

- Maker with advanced hobbyist level skills in CAD modeling, CNC toolpaths and machining, 3D printing, electronics, and minor coding.
- Advanced mechanic with expertise in automotive repair, restoration and modification.
- Former professional metal fabricator. Proficient in welding, cutting and metal forming.