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# **René Sepúlveda**

# Climbing Experience

Observer Member of Executive Board, IFSC — June 2024-Present

* Observer member of IFSC Executive Board representing North America. Participated in Executive Board meetings, attended Paris Games with EB, and participated in Climbing Summit. Contribute ideas on a wide range of topics of interest to IFSC from climbing media to proposed scoring changes.

Member of Combined Scoring Working Group, IFSC — 2022-2023

* Served on IFSC Working Group which developed new scoring system for 2024 Olympic Boulder & Lead Combined format. Helped develop new ideas and concepts to address both goals of the IFSC and athlete concerns about maintaining parity between disciplines. Created statistical model of climbing using past World Cup results and used it to create competition climbing simulator to evaluate scoring ideas and variations. The recommendations of the working group were adopted by the IFSC as the new scoring system.

Co-Owner, Member-At-Large of Board of Directors, Sportrock Climbing Centers — 2019-Present

* Serve on Board of Sportrock which owns and operates 4 large climbing gyms with several more under construction. Focused on analyzing and understanding trends in the climbing industry and supporting competition climbing. Developed concept and business plan for Sportrock Performance Institute – a training focused gym and competition venue for youth and adult climbers. Within 3 years Sportrock’s youth team improved from qualifying 2 athletes to Youth Nationals to 20+ athletes and multiple top 10 team national rankings. Serve on working group that designs and develops new climbing gym locations including the state of the art Sportrock Rio gym which hosted USA Climbing

Co-Founder, Federación Puertorriqueña de Escalada — 2020-Present

* Led effort to establish a climbing federation to promote and grow competition climbing in Puerto Rico. Developed strategic plan for the federation and worked with partners in Puerto Rico to start implementing it. Completed application to IFSC and worked with IFSC to meet its requirements culminating in gaining recognition for FedPR in December 2020 with full membership in March 2021. Worked with Puerto Rico’s National Olympic Committee (COPUR) to gain its recognition and coordinated with COPUR on Puerto Rico’s first participation in climbing at the 2023 Pan American Games in Santiago.
* Serve as FedPR’s primary delegate to IFSC and Pan American Council (PAC) events. Participate regularly in PAC meetings covering a range of topics from competitions to rules to governance. Worked with USAC and CEC to develop North American Cup series and wrote the NACS Event Manual. Participated in 3 IFSC General Assemblies and numerous National Federation calls with IFSC.
* Team manager for numerous World Cup competitions communicating and coordinating with athletes, handling registration and confirmation of attendance, participating in technical meetings, assisting in isolation, and submitting appeals.

Regional Coordinator, Head Judge, Level 6 Belayer, CTF Member, USA Climbing — 2016-Present

* Served as Region 81 Regional Coordinator for 6 years, organizing and running Qualify Events and helping to organize and run all 24 youth championships – events as large as 350 competitors – during my time as an RC. As a Regional Coordinator I focused on relationships with gyms, communication with parents, and training event judges.
* Belayer at many National-level competitions starting with 2018 Open Sport and Speed Nationals and including numerous Sport Nationals, Combined Invitationals, NTT and NACS events. One of only four “Level 6” belayers who can serve as head belayers for important National level events and have served as head belayer for Collegiate Nationals, Youth World Championships, Sport Nationals and Combined Invitational. Assisted with development of the official belay handbook and associated educational materials.
* Head of schedule subgroup of Competition Task Force (CTF) that for 18 months researched and ultimately made recommendations for major changes to youth competition season structure in support of improving the health and safety of youth athletes and encouraging ongoing participation. Most of the recommendations of the CTF were ultimately adopted by the USAC Board.

# Professional Experience

Senior Solutions Architect, NVIDIA Corporation — 2024-PRESENT

* Lead technical manager of relationship with one of NVIDIA’s largest GSP partner ($3+ billion in AI revenue). Engage with C and executive level management at partner to develop technical strategies for AI Factory and AI software efforts. Organize, develop and deliver training to technical teams. Work with sales teams to identify and purse opportunities.

Co-Founder, CTO, Horizon HPC — 1999-2024

* Founded and led company specializing in scientific and high performance computing. Projects included AI efforts with US Postal Service to improve package sorting machine efficiency; fundamental research on AI-based object reconstruction and neural rendering methods; real-time, high-fidelity volumetric capture; high performance statistical analysis systems for financial applications; computer vision systems for railyard safety; computer vision systems for indoor positioning system; real-time volumetric visualization system for robot-aided brain surgery system; real-time 3D visualization systems for immersive training systems. Sport-related highlights below.
* Developed AI and computer vision algorithms to process video of NFL games from in-stadium camera systems to track players, extract poses and generate 3D reconstructions of individual plays. Fused data extracted from videos with Amazon NGS data to improve accuracy and precision. Data used to analyze player load, injury risk and model effects of proposed rule changes.
* Designed architecture for action sports startup for collecting performance data from athletes in real-time for broadcast and other uses. Led development of body worn sensors; data collection and delivery infrastructure; and algorithms for fusing collected data with live video streams. Developed models of performance for skateboard and snowboard half-pipe events to extract meaningful performance metrics from sensor data. Demonstrated concept to athletes, video production partners, sponsors, action sports training facilities and equipment manufacturers.

# Education

**Johns Hopkins University, Whiting School of Engineering,** Baltimore, MD – Master of Financial Mathematics. Expected graduation Fall 2025.

**Harvard University**, Cambridge, MA — B.A. 1996. Graduated Cum Laude.

Coursework in single and multi-variable calculus, linear algebra, differential equations, physics, C/C++ programming, computer graphics, computer graphics research, and finance. Worked as researcher in Computer Graphics department developing algorithms to simulate and visual bubbles in liquids.