Richard Schure

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EDUCATION

University of Washington, Seattle, WA Master of Science in Aeronautical & Astronautical Engineering (Plasmas)

- Research on Waveguide Electron Cyclotron Resonance (ECR) Thrusters in the Space Propulsion and Advanced Concepts Engineering (SPACE) Lab.
- Advanced coursework in Plasma Theory, Fusion Plasmas, Complex Analysis, and Dynamical Systems.

University of Washington, Seattle, WA Bachelor of Science with Departmental Honors in Aeronautical & Astronautical Engineering, June 2022

• GPA: 3.65 • University Honors Program • President, Mortar Board National College Honor Society

North Seattle College, Seattle, WA

• GPA: 3.62 • President's & Vice President's List • Phi Theta Kappa Honor Society

LEADERSHIP & ADVOCACY EXPERIENCE

President, June 2024 to Present

Graduate and Professional Student Senate (GPSS), University of Washington, Seattle, WA

- Elected to represent 18,000+ graduate and professional students across three UW campuses at university, state, and federal levels.
- Chair the GPSS Executive Committee (6 officers, 7 executive senators) and Senate (~100 senators).
- Serve on high-impact committees (Board of Regents, Faculty Senate, PACS, GSES, SAF, STF, UWAA), ensuring graduate student perspectives are heard in budget, policy, and strategic decisions.
- Lead legislative advocacy by drafting the GPSS legislative agenda and collaborating with Washington Student Association (WSA) on statewide priorities.
- Oversee 40+ graduate student liaisons to 29+ campus committees, ensuring robust communication and representation.
- Champion diversity and inclusion efforts, collaborating with the Diversity Committee and campus support centers to address graduate student well-being and equity.
- Initiate health services improvements, focusing on mental health and wellness initiatives for graduate students.
- Spearhead AI policy discussions as part of the Taskforce on Student Engagement with Artificial Intelligence.
- Drive fundraising efforts and donor engagement to expand graduate grants, resources, and programming.

Senator, January 2024 to June 2024

Associated Students of the University of Washington (ASUW), University of Washington, Seattle, WA

- Represented graduate interests in policymaking and advocacy efforts; drafted and passed legislation impacting campus climate and student life.
- Served on legislative committees to ensure proposals addressed the needs of graduate students across disciplines and campuses.

President, May 2021 to June 2022

Mortar Board National College Honor Society, Tolo Chapter, University of Washington, Seattle, WA

- Led meetings and strategic planning for 20+ members, expanding membership by 100%.
- Organized service, leadership, and DEI-focused events; secured national awards for chapter excellence.

RELEVANT PROJECT & RESEARCH HIGHLIGHTS

Research Assistant, Multiscale Analysis of Materials and Structures (MAMS) Lab, March 2022 to June 2022

• Investigated Discontinuous Fiber Composite (DFC) microstructures and their mechanical properties.

Senior Capstone Engineer, ECR Plasma Thruster Project, November 2021 to June 2022

- Redesigned an ECR thruster and optimized microwave antenna designs using simulations and genetic algorithms.
- Developed a swappable antenna system to improve thrust efficiency and specific impulse.

Founder & Research Scientist, Hexa Materials, LLC, September 2015 to Present

- Led R&D for scalable graphene manufacturing; collaborated with legal experts on patent and IP strategy.
- Presented prototypes to investors, guiding long-term growth and market positioning.

TEACHING & MENTORING

Teaching Assistant, AA 331: Aerospace Structures I, January 2023 to March 2023

• Created exams and detailed solutions for 65+ junior-level students; provided weekly office hours.

Grading Assistant, AA 405: Introduction to Aerospace Plasmas, September 2022 to December 2022

• Led Q&A sessions for 10–30 students and graded homework in plasma physics and engineering applications.

Math Tutor & Student Mentor, North Seattle College, September 2019 to June 2020

• Provided individualized tutoring in math through calculus for 3–5 students weekly.

HONORS & AFFILIATIONS

Dean's List, UW (Spring 2021, Fall 2021, Winter 2022)

Board Member, UW Book Store (Sept 2024 – Present) and UW Alumni Association (June 2024 – Present) Member, American Institute of Aeronautics and Astronautics (AIAA); International Space Elevator Consortium Phi Theta Kappa Honor Society (2019 – Present)

ADDITIONAL DETAILS AVAILABLE ON REQUEST