

Hugh Gramelspacher

360-522-6188 | hughgramelspacher@gmail.com

[linkedin.com/in/hugh-gramelspacher/](https://www.linkedin.com/in/hugh-gramelspacher/)

EDUCATION

- **University of Washington - Seattle Campus** Seattle, WA
Bachelor of Science and Bachelor of Arts in Computer Science and History Sep 2022 - Expected Dec 2026
 - GPA: 3.93
 - Relevant Courses: Data Structures and Algorithms, Software Design and Implementation, Hardware/Software Interface, Systems Programming, Web Development, Introduction to Database Systems, Machine Learning, Deep Learning

PROJECTS

- **Fantasy Football Draft Optimizer** | *Python, NumPy, Pandas, R, Yahoo Fantasy API*
 - Designed Monte Carlo simulation engine to model thousands of draft scenarios, applying probability, data structures, and optimization techniques to support decision-making.
 - Applied statistical analysis and visualization to generate probability distributions of league standings.
 - Integrated with Yahoo Fantasy API for real-time computational analytics and predictive modeling.
 - Created simulation models that improved decision-making accuracy under uncertainty in dynamic environments.
- **Language Learning Platform** | *Next.js, TypeScript, Firebase, Azure TTS, Gemini API*
 - Built a scalable data system for adaptive spaced repetition, leveraging applied mathematics and computational models of memory.
 - Implemented analytics pipeline to track user performance and optimize vocabulary retention.
 - Collaborated in a multidisciplinary team environment to design and deploy scalable learning features.
- **Snack Business Sales Projection Model** | *NumPy, Pandas, scikit-learn, Tableau, MATLAB, R*
 - Developed regression and machine learning models for forecasting, improving operational effectiveness and resource planning.
 - Prototyped mathematical models in MATLAB and R to validate long-term demand and profit optimization.
 - Automated reporting with Tableau dashboards, enhancing decision-making and organizational efficiency.
 - Applied optimization and decision-making frameworks to recommend actionable business strategies.

EXPERIENCE

- **Snack Lounge Operations Manager** Spring 2025 – Present
ACM, University of Washington Seattle, WA
 - Applied data-driven decision-making and optimization to manage \$20,000+ in annual purchasing and sales.
 - Modeled inventory systems to reduce theft by 75% and improve operational efficiency.
 - Increased profit margins by 50% by analyzing supply chain data and implementing transformation strategies.
 - Coordinated with engineers, student leaders, and vendors to align technical models with operational goals.
- **Inventory and Reimbursement Specialist** Aug 2022 – Present
University of Washington Seattle, WA
 - Streamlined 1,500+ asset tracking records using computational analytics to improve data accuracy and retrieval.
 - Automated record reconciliation with Python scripts, improving data consistency across 1,500+ assets.
 - Processed \$10,000+ in monthly reimbursements with strict adherence to systems modeling and compliance requirements.

TECHNICAL SKILLS

Linux, C++, R, Python, Java, data structures, machine learning, deep learning, mathematics, communication skills, MATLAB, NumPy, Pandas, scikit-learn, Tableau, SQL, JavaScript, TypeScript, React, Next.js, Firebase, Git, Docker, Bash, LaTeX