

John S. O'Meara

📍 Seattle, WA ✉️ johnomeara40@gmail.com 🌐 johnomeara.com 🐙 jsomeara

Education

University of Washington B.S. in Computer Science, Paul G. Allen School of Computer Science & Engineering	Expected June 2030
Issaquah High School GPA: 3.99/4.00 SAT: 1570/1600 National Merit Finalist	Aug 2022 – June 2026

Experience

University of Washington Makeability Lab , High School Researcher - Designed and developed <i>RampNet</i>, a two-stage pipeline for detecting curb ramps from streetscape imagery using open-government metadata. - Trained computer vision models in PyTorch, designed experiments, analyzed results, and first-authored the resulting paper, published at an ICCV 2025 workshop. - Presented the work to Microsoft Research at an invite-only Allen School event; mentored by Prof. Jon Froehlich.	Aug 2024 – Mar 2026
Skyhouse , Founder - Co-developed a Minecraft automation mod and companion website (w/ NuxtJS) with user authentication, subscriptions, and premium access. - Grew the product to 2,000+ users and generated \$4,000+ in subscription revenue.	Aug 2022 – June 2023
IHS Code Club , President	May 2025 – June 2026

Publications

RampNet: A Two-Stage Pipeline for Bootstrapping Curb Ramp Detection in Streetscape Images from Open Government Metadata <i>John S. O'Meara</i> , Jared Hwang, Zeyu Wang, Michael Saugstad, Jon E. Froehlich 10.1109/ICCVW69036.2025.00693 🔗 Workshop Proceedings of ICCV 2025	2025
BikeButler: A Personalized, Context-sensitive Bike Routing Tool using Open Data and VLM-based Analyses of Street View Imagery Jared Hwang, <i>John S. O'Meara</i> , Zeyu Wang, Jasmine Zhang, Jon E. Froehlich 10.1145/3772318.3791292 🔗 Proceedings of the 2026 CHI Conference on Human Factors in Computing Systems	2026

Awards and Honors

Congressional App Challenge , 1st Place (WA-09) Recognized by U.S. Rep. Adam Smith.	Jan 2025
HackPNW Hackathon , 1st Place Video 🔗 - Our collaborative study app (SATShark) won against 140 other competitors. - Built using Socket.IO	Mar 2024

Skills

Languages & Systems: Python, Java, Kotlin, TypeScript, JavaScript, Node.js, Linux/Bash, Docker, Git, HPC (Slurm)
Other: PyTorch, Hugging Face Transformers, Computer Vision, Machine Learning, NumPy, Pandas, Full-Stack Dev