Hello. I'm David Rappaport.

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I'm an innovator, a deep generalist, and a believer in creating things which meaningfully touch and improve people's lives. I bring a rare combination of leadership, engineering, and user experience design skills, and I draw on all of these to craft material solutions to real-world problems. I have a track record of highly impactful creativity and innovation; at Microsoft, I have grown personal side projects into substantial team efforts which have come before our CEO and entered the product roadmap. I have collaborated with artists and doctors, startups and corporations, and in each case I have been recognized for my ability to tackle the abstract and "make it real." As a leader, I excel at uniting diverse teams under a common vision, leveraging excellent communication skills, a keen eye for detail, and an empathetic approach which brings out the best in others. I believe in approaching each new challenge with authenticity and a willingness to grow, and I strive to bring this mentality to my work every day.

Experience

2017 - Present

Technical Program Manager | Microsoft Applied Sciences Group

– Ground-up product development in a fast-paced incubator for Microsoft's Devices business. I lead multidisciplinary teams (electrical, software, mechanical, design, research, sales, marketing, etc.) through creation of V1 products, harnessing cutting-edge tech to transform user experiences.

2016 - 2017

Electrical Engineer | Microsoft Applied Sciences Group

– End-to-end development (requirements though bringup) of various projects involving custom hardware, firmware, and software.

2020

Independent Collaborator | Shift Labs

– As my MS capstone project, I worked with medical device startup Shift Labs to design the user experience for the next generation of the DripAssist infusion rate monitor. Work included foundational research and multiple rounds of interaction design, prototype creation, and testing with clinicians.

2020

Engineering Consultant | UW Engineering Innovation in Health

- Consulted on a variety of medical device projects, with focus on embedded systems design and prototyping.

Education

Class of 2020 (graduating in June)

MS in Human Centered Design & Engineering | University of Washington, Seattle

– 2020 recipient of Graduate Award for Academic Excellence. Achieved 4.0/4.0 GPA while working full-time. Notable coursework: Interaction Design, Usability Studies, Engineering Innovation in Health, Inclusive Technology Design, Information Visualization, Qualitative Research, Experimental Research.

Class of 2016

BS in Electrical & Computer Engineering | University of Colorado, Boulder

– Graduated with honors. Held multiple TA and leadership positions within the College of Engineering and the Engineering Honors Program.

Additional Roles

Microsoft Applied Sciences Group (internship, 2015) Microsoft Surface (internship, 2014) National Instruments (internship, 2013) Webscan (internship, 2013 - 2014) EMTech (engineering consultant, 2012)

Work Highlights

- Lead PM for new class of hardware product at Microsoft, leveraging state-of-the-art sensors and algorithms.
- Founded cross-company effort within Microsoft to **make computing more accessible for people with disabilities** through adaptive hardware and software. Built team to develop concept, won first place in category at company hackathon, and went on to influence product roadmap.
- **Designed user experience** for next generation of Shift Labs' DripAssist, a simple, low-cost medical device for monitoring gravity-fed intravenous infusions.
- Invented technique to enable on-screen capacitive position tracking of Microsoft's Surface Dial.
- Integrated first-ever fingerprint sensor into a Surface product (Microsoft's **Surface Pro Type Cover with Fingerprint ID**).
- Developed an **assistive writing utensil** which helps children with sensory processing disabilities learn to write by providing real-time tactile feedback.
- Worked alongside clinicians from UW Medicine to prototype medical devices, including cardiac monitoring tech intended to reduce stillbirths in low-resource settings.
- Collaborated with Microsoft Xbox Adaptive Controller team to gather field insights from clinicians.
- Mentored a high school robotics team over a span of 4 years.
- As an intern at Microsoft, **assembled/led a team of 20+ interns to build a "space balloon"**, culminating in an interactive flight experience which drew participants from 119+ countries.