Nathan Ko

nathan@nathanko.com · nathanko.com · linkedin.com/in/nathanko

Skills

- Product management, UX design principles
- Frontend development: JavaScript, React, Angular
- Backend development: Python, Java, C++, SQL
- Machine learning, e-payments, augmented/virtual reality, network/web security
- Design thinking, Agile, Scrum

Education

Bachelor of Software Engineering Candidate, University of Waterloo   Sep 2016 – Apr 2021 (Anticipated)
- Course topics include: distributed systems, computer network security, machine learning, entrepreneurship

Projects

- **Punctuation.space** — Driving product strategy, feature definition and design with a small team to build a powerful and unique notetaking platform for students taking online courses.
- **Smart Actions** — Managed productization of a powerful search experience that allows users to use natural language expressions to rapidly navigate and complete workflows in a large human capital management platform (see my *Lifion by ADP* experience below).
- **AwesomeListr.com** — Built a search engine for GitHub community-curated developer notes ("awesome lists") including a site crawler, document parser, text classifier and a React/Flask web application.

Experience

Technical Product Owner Intern – Platform Machine Learning, Lifion by ADP   Sep – Dec 2020
- Drove feature definition, adoptions and roadmap of an intelligent search product through collaboration with other product owners, engineers, ML researchers, and designers (see my *Smart Actions* project above).
- Won buy-in from application product owners to adopt machine learning platform capabilities by evangelizing product vision and identifying opportunities based on their objectives and priorities.
- Maximized product impact and mitigated launch risks by prioritizing features based on stakeholder needs.

Software Engineering Intern, Interaptix   Jan – Apr 2020
- Improved ergonomics of an augmented reality HoloLens app that visually guides workers through an intricate assembly process by developing intuitive hand gesture support in C#.
- Researched texture transfer techniques to generate photorealistic product imagery from 3D models.

Software Developer Intern, Delego   May – Aug 2019
- Mitigated costly fraud risks and offset merchant chargeback liability by integrating PCI 3-D Secure authentication for credit card transactions in an e-payments platform serving many large enterprise clients.
- Decreased software build times by up to 90% by optimizing workflows using Gradle.

Software Prototyper Intern, Deloitte   Sep – Dec 2018
- Prototyped a home and auto insurance application portal using Angular.

Security Software Development Intern, BlackBerry   Jan – Apr 2018
- Strengthened BlackBerry's security product line by building device management features for Android.
- Hardened Wi-Fi authentication for NIAP security certification by extending stock Android and Linux services.

Software Systems Developer Intern, Government of Canada   May – Aug 2017
- Prototyped a job monitoring and notifications system for a proprietary cloud analytics platform.