PAUL KUSISTO

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EXPERIENCE

Amazon – Seattle, WA ‖ Remote   *July 2017 – Present*

Senior Software Development Engineer, Amazon Physical Stores   *July 2022 – Present*
- Mentored, guided, and served as technical leader for a team of 28 Software Development Engineers and 3 managers.
- Lead the restructuring of a core service within the Amazon Physical Stores space from conception to implementation, better aligning our architecture with the long-term business vision, while simultaneously supporting multiple company-wide business and tech initiatives. This work also greatly simplified our technical interfaces, removing the need for six services (across three distinct orgs) as well as 32 APIs, more than 100 database tables, and more than a dozen AWS accounts for the core teams.
- Identified, surfaced, and fixed issues in shared internal and AWS systems, including fixing a critical error in S3's documentation.
- Identified and implemented major optimizations for performance-critical code, including decreasing one service's call volume to a dependency by 97.6%, and reducing another service's response size by 79%, all fully transparently to clients.
- Trained other engineers on AWS technologies, organizing and leading talks, workshops, and both team and one-on-one consultations on how best to leverage AWS technologies such as Lambda, DynamoDB, and S3.

Software Development Engineer, Amazon Go ‖ Amazon Physical Stores   *July 2018 – June 2022*
- Proposed, advocated for, and led the implementation of a physical-stores-wide, tens-of-thousands-of-RPS scale, tier-1, globally-distributed, multi-region, multi-writer product attribute storage system used for more than 14 use cases across physical stores processes. This system is used for critical functionality across multiple lines of business, including alcohol licensing requirements in the UK, dimension and weight data for products in Just Walk Out stores, and food safety rules in Amazon Fresh.
- Designed and oversaw the implementation of a tier-1 system which integrated with the Amazon.com catalog to automatically categorize and group more than 50k products per store into the more than 8k "sets" that form the foundation of the Amazon Style experience. This system handled double-digit RPS in the critical path of systems ranging from the mobile app experience, to the ML recommendation algorithms, to the corporate-level planning process, to the over 3000 price labels per store.
- Performed updates on widely-used packages, such as migrating an Amazon-wide authentication library from Node.js 6 to Node.js 10, and adding rate-limiting controls to a DNS-management library used by more than 70 services within Amazon Go.

Software Development Engineer, Fast Fulfillment Experience   *July 2017 – July 2018*
- Built and operated critical, tier-1 distributed applications which processed millions of customer orders (worth more than $120 million) each month across the USA, UK, Germany, India, and Japan in support of Amazon Fresh and Amazon Prime Now.
- Improved team processes and developer productivity as the team's scrum master.
- Scaled our automated end-to-end test system from concurrently testing 10 purchases to more than 1,000 purchases.

Software Development Engineer Intern, Imaging Systems   *May 2016 – August 2016*
- Worked with multiple business partners to design, develop, and test a new service to provide Amazon imaging studios around the world with dynamically generated style guidelines, imaging settings, and example images for every product being imaged.
- Created a prototype system which used image analysis techniques to identify mismatches between product images and titles.

Indiana University – Bloomington, IN

Undergraduate Instructor, CSCI-B 351 (Intro. to Artificial Intelligence)   *August 2015 – December 2016*

Cigital – Bloomington, IN

Intern, Cigital Assessment Center ‖ Automation Team   *May 2015 – August 2015*

General Electric – Louisville, KY

IT Leadership Program, Factory Information Systems   *May 2014 – August 2014*

EDUCATION

Indiana University – Bloomington,IN   Cumulative GPA: 3.98/4.00

Bachelor of Science in Computer Science with Departmental Honors, and Highest Distinction   *May 2017*
- Minor in Mathematics, and Minor in Entrepreneurship & Small Business Management
- Cross Campus Certificate in Entrepreneurship, and Certificate in Underwater Resource Management

Board of Aeons, Member   *August 2016 – May 2017*

Harvard Business School Online   Pass with High Honors

CORe: Credential of Readiness   *August 2014*
- Summer program of Harvard Business School involving three online courses:
  Business Analytics (quantitative methods), Economics, and Financial Accounting

TECHNICAL SKILLS

Languages: Java, Kotlin, Typescript   **Platforms:** AWS   **Web:** HTML, CSS, JavaScript