

Yakshdeep Kaul

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Staff-level Software Engineer (10+ years) leading search, recommendations, and GenAI systems at consumer scale. Technical strategy and cross-org influence spanning 170+ engineers.

SKILLS

Programming Languages: Java, TypeScript, React (using TypeScript)

AI/ML & GenAI Systems: Amazon Bedrock, SageMaker, RAG & vector search (OpenSearch), LangChain, prompt engineering, LLM-based ranking & content moderation, AI-agent adoption metrics

Cloud Computing Platform & Software Frameworks: Docker, Distributed Application Scaling, CI/CD via AWS CDK & CloudFormation, AWS Step Functions, AWS DynamoDB, AWS Redshift, AWS Kinesis, AWS ECS Fargate, AWS Lambda

PROFESSIONAL EXPERIENCE

Sr. Software Development Engineer, Amazon (Amazon Kids) — Toronto, Canada — Jul 2021 to Present

~Staff/Sr Staff equivalent based on range overlap

- Engineering Lead for the product team owning expanded catalog discovery and acquisition for kids and parents; drove engineering tech stack convergence of an 8-year-old search and recommendation system onto central Amazon systems
- Built a 0-to-1 product generating >\$20MM revenue per year, delivered by a 5-engineer POD team
- Built a GenAI content moderation system for child-appropriate content; 2 patents pending
- Leading improvements in AI Native engineering workflows across multiple VP engineering orgs spanning 170 engineers; increased AI-driven code commits from 20% to 45% across 3 VP engineering orgs
- Currently ranked in the Top 3 most senior engineers in the 80 engineer Director Org

Software Development Engineer II, Amazon (Amazon Kids) — Toronto, Canada — Feb 2020 to Jul 2021

- Drove the design and implementation of core approval features from scratch for the brand-new Amazon Kids Store Business (AWS ECS Fargate, AWS Lambda, Java, React, DynamoDB, AWS Step Functions, AWS Kinesis, AWS CloudWatch)
- Drove security certifications of critical applications across multiple organizations
- System generates 700K unique child and parent interactions per day, with a 9% acquisition (order) conversion rate

Software Development Engineer II, Amazon (Device S&S Technology) — Seattle, WA — July 2018 to Feb 2020

- Drove the design and delivery of multiple projects to transfer inventory between 1P & 3P Amazon warehouses (EDI, AWS Lambda, AWS EC2, Java)
- Drove a high security & operational bar for existing & new applications to maintain a manageable operational load

Software Development Engineer I, Amazon (Device S&S Technology) — Seattle, WA — Feb 2017 to June 2018

- Owned design, development, testing, and maintenance of nearly 50 software services automating the planning, ordering, fulfillment, & accounting of Amazon Devices sold to offline resellers

Software Development Engineer Intern (HPSW Fortify R&D), HPE — Alpharetta, GA — Jun 2016 to Dec 2016

- Programmed a Related Host module using Microsoft's Bing API with a custom sorting algorithm
- Ported & Programmed several OWASP Top 10 vulnerability checks for a Vulnerability Scanner (C#)

Software Engineering Intern, Cisco Systems India Pvt. Ltd. — Bengaluru, India — Feb 2015 to Jul 2015

- Programmed Closed Caption Service (ARIB) in a Set-Top-Box for a client in Brazil (C)
- Nominated for You Inspire 3 Award for 'Change The World' by Supervisor

EDUCATION

Georgia Institute of Technology (4.0/4.0)

MS in Electrical & Computer Engineering — Atlanta, GA — Aug 2015 to Dec 2016

Courses: Machine Learning for Trading, Computer Networks, Advanced Operating Systems, Dependable Distributed Systems, Wireless Networks, Advanced Programming Techniques, Advanced Computer Security, CAD for Computer Networks, Computer Network Security, Computer Communications Network

Manipal Institute of Technology (9.37/10) (Top 5%)

B Tech in Electronics & Communications Engineering — Karnataka, India — Jul 2011 to Jul 2015