TOM RASMUSSEN

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WORK EXPERIENCE

July 2021 –
Copia Automation – Senior Software Engineer
· Designed and developed a new product which had a successful alpha and beta program, launched publicly and booked revenue in 9 months of development.
· Grew a team from one to six developers and led the project planning, execution, and delivery.
· Monetized a web-based SaaS product by adding in-app free trial and checkout flow.
· Added SSO feature to unblock revenue from enterprise customers.

July 2019 –
July 2021
Amazon – Software Development Engineer II
· Built a product search feature using AWS Elasticsearch which saved $250k of infrastructure billing annually.
· Developed a load testing utility in AWS that was used to fix a recurring failure of a real-time stream ingestion and aggregation application operating at up to 2000 TPS.
· Contributed critical components to a computer vision data platform for performing human annotations on hundreds of thousands of images and persisting the results.

July 2017 –
May 2019
Blue Origin – Software Engineer
· Developed tools in MATLAB to model and optimize rocket subsystems including landing legs, auxiliary power unit, thrust vector control, and hydraulic systems.
· Led the development of a complete hydraulic simulation of a reusable rocket booster in MATLAB.
· Delivered tools to import, analyze, and visualize large datasets from Monte Carlo flight simulations.
· Designed and programmed a user-configurable high-performance data acquisition system with 100+ channels of I/O to support a wide variety of development testing for an orbital launch vehicle.

EDUCATION

2013 – 2017
Columbia University – New York, NY
B.S. in Mechanical Engineering, minor in Computer Science
Honors: *magna cum laude* (GPA 3.92)

SKILLS

Skills
· Full-stack development and systems architecture in AWS.
· Project planning, scoping, and prioritization.
· Big data pipelines and high-traffic web applications including real-time streaming applications.
· Modeling, analyzing, and optimizing systems with a computational approach.
· Strong mathematics fundamentals, exposure to machine learning and linear algebra.
· Strong drive to meaningfully contribute to complex and technically ambitious projects.

Technologies
· AWS cloud native development (Lambda, Dynamo, EC2, SQS, SNS, S3, IAM, CloudFront, etc.).
· Big Data pipeline ETL and orchestration using Hive, EMR, Athena, Redshift, and Step Functions.
· Comfortable with Java, C++, Python, Go, TypeScript, React, SQL, MATLAB.