MISHA BERGAL

BACKEND ENGINEER.
LIKES STARTUPS. WORKS IN TEAMS.

—I thrive and mostly worked in startups, taking on roles of founding engineer, team lead, or individual contributor, delivering pioneering products in short time frames.

—I enjoy working in languages with modern static type systems like TypeScript, Python, or Ocaml. Always up for learning a new language or framework.

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Senior Software Engineer Another Stealth Startup July 2023 - March 2024	Software engineer in a small team working on a new product for sales teams in B2C space. Backend. Designed & developed a customizable data pipeline for ETL customer data from multiple sources (Salesforce, Hubspot, Snowflake) and then cleaning, transforming to common model, and loading it into a data warehouse for a consequent analysis. *Python 3, Django, FastAPI, Typescript, Temporal, Pandas, Postgres, AWS ECS, Terraform*
Senior Software Engineer Stealth Startup January 2023 - June 2023	Member of a two-person engineering team tasked with designing and implementing a computer vision-oriented ML inference platform that would support composing complex inference workflows from multiple ML models. Frontend. Designed and developed CLI and Python SDK for the platform. *Python 3, Temporal, Kafka, Docker* Backend. Designed & developed functionality and REST API for deploying, running, and managing inference workflows.*Python 3, FastAPI, Temporal, CUDA, Docker, k8s*
Senior Software Engineer, AI Team SmileDirectClub, Nashville, TN May 2021 — November 2022	As the engineer responsible for all backends and infra on a small autonomous team (7 ML, 2 mobile and one backend engineer), I played a crucial role in delivering SmileDirectClub's strategic, "game-changing" 2022 innovation, the SmileMaker Platform. Backend/DX. Designed & implemented ML inference infrastructure. Designed & implemented ML inference backends (*Lambda, Batch, or ECS Fargate,* depending on workload) and event and REST-based integration microservices to integrate ML with business workflows. Designed & implemented CI/CD for CPU and GPU-based models. Designed & implemented non-ML parts of internal SDK. *Python 3, Pyright, Pytorch, CUDA, DVC, AWS (multiple services), Terraform CDK.*
Principal Backend Engineer ReelHealth, Los Angeles, CA September 2020 — May 2021	As a part of a 5-person team, I developed a set of applications for COVID testing on the sets of show productions for Netflix, Amazon, and other studios. We didn't get an Emmy for that, but we deserved it :). Frontend. Developed mobile and web frontends. *React and ReasonML/Rescript.* Backend. Designed, built, and managed/operated GraphQL-based backend and a set of auxiliary microservices built with *Nodejs, ReasonML/Rescript, GraphQL, Hasura, AWS, PostgreSQL, k8s, Terraform, and Terraform Cloud* .
Principal Software Engineer IDx Technologies, Coralville, IA October 2018 — August 2020	I led a 4-person Windows client app and then 3-person backend/infra teams that developed the next version of the first-ever FDA-Approved autonomous diagnosis AI device. The device is designed to diagnose eyesight-threatening complications of diabetes and is classified as Class "C" (Death or Serious Injury is possible due to device malfunction). Windows Client. Designed client application split into Web Desktop and Windows Service communicating with Cloud-based backend, implemented the Windows Service in C# and .NET Core. The team shipped the first demoable version of the app in just one week. *C# .NET Core, Electron, React + TypeScript.* Cloud Backend. Designed and implemented REST API cloud applications to support the integration of diagnosis software with customers' health information systems via multiple health information exchange protocols (DICOM, HL7, FHIR). *NET Core, C#, AWS (EC2, RDS, EKS, and others), k8s, Pulumi + TypeScript, MySQL, Nginx, Prometheus, Grafana*