### Boris Dev

# Role: AI Engineer

To augment human creativity, I build tools that merge natural language with code.

## Style

 $\bullet$  tackle ambiguous problems  $\bullet$  tackle process friction  $\bullet$  tackle cross-silo knowledge gaps to unstick projects  $\bullet$  explore semantic nuances of the data  $\bullet$  deliver prototypes  $\bullet$  build conceptual frameworks [aka., primitives]

#### Tech stack

• Data science: LangChain, Sklearn, Pandas, Geospatial • Engineering: Distributed systems, Observability, Analytic endpoints

### Notable successes

- New mystery story generation starting from understanding the primitives New CPAL LLM Chain is the first causal LLM chain. Tweet by LangChain
- Nobsmed.com, a side project to help ordinary people evaluate their medical treatment options New observability system designed and built for two companies New data curation process for two companies New language AI feature for one company New microservice paradigm for one company New geospatial human inequality metrics (PhD) Climbed Cotopaxi (21,000 ft) Bodyboarded Mexpipe

### Job experience

## Engineer consultant at Wolf Games, 2023

- research engineering for mystery story generation
- storyboard composition grammar

#### Engineer consultant at Intuitive Systems, 2023

Intuitive System's is an early stage start-up building language AI applications for vendor management and customer complaint triage.

- high-level advisor
- canonicalization algorithm
- LangSmith evaluators

# Engineer consultant at SimpleLegal, 2022-2023

SimpleLegal is a legal billing analytics company.

- Shifted team from data quantity to data quality
- Managed the offshore annotators with new inter-annotator performance metrics
- Led the Senior Data Scientist and the subject-matter expert.
- Assigned engineering tasks
- Built SageMaker inference server

#### Lead Analytic Endpoint Engineer at Sight Machine, 2018-2021

Sight Machine is a manufacturing analytics company.

- To get the company's biggest public-facing feature, Recipes, across the GA line, I worked across silos (Customer Success, DevOps, Data Engineers). I wrote high-level design papers to help the Product and Customer Success teams understand the time cost of competing technical design decisions, arming them with a conceptual framework to gather more information from the customer on her priorities.
- I started a new checklist process to lock down successful sales demos.
- I nudged the engineering team to move from a delivery team to a product team. The Director of Engineering and I started a new process where the engineers fleshed out their own Jira issues. The new technical design autonomy reduced engineering toil and increased creativity.
- I built the first distributed tracing (Lightstep), which made debugging system downtime easier.
- I proposed and delivered a new standardized frontend development environment. The innovation made debugging and on-boarding easier.
- I coached junior engineers in systems thinking.

#### Lead Data Engineer at HiQ Labs, 2015-2018

HiQ Labs was a people analytics company.

- I led the migration from a monolith to a microservice paradigm.
- I migrated the Data Scientists from Mongo queries to PySpark.
- I designed and built the scaping system V2
- I trained a Junior Data Engineer to maintain the scraping system.
- I led a Junior DevOps engineer to build a Splunk pipeline observability system.

#### Developer at Urban Mapping, 2011-2013

Urban Mapping provided geospatial analytics to Tableau.

- CI/CD/QA pipeline
- Observability

# Misc leadership roles

- Worked with students in Medellín, Columbia to make ClusterPy.
- Kids snowboard instructor at Vail Resorts, CO.
- Restaurant Assistant Manager at Vail Resorts, CO.
- Counselor for emotionally disturbed children. Seneca Institute. CA.

## Open source code and writing

- Langchain PR: Causal Program-aided Language (CPAL)
- Normalize tables using a LLM
- How can language AI performance be raised with cognitive empathy?
- A play Ethereum MEV bot
- Small commit to shell-ai
- A git bare approach to version control your dot files
- Work papers
- Geoscore (repo)
- $\bullet \ \ {\rm PhD} \ \ the {\rm sis.} \ \ {\it Assessing Inequality using Geographic Income \ Distributions}$
- Spatial Econometrics entry. Encyclopedia of Human Geography. 2009.
- Interactive spatio-temporal modelling of health systems
- $\sigma$ -convergence in the presence of spatial effects
- Integrating Econometric and Input-Output Models in a Multiregional Context