

Boris Dev

Role

I merge human expertise with AI through knowledge graphs.

human expertise \rightarrow AI knowledge graph \leftarrow human question

Stack

- **Language AI:** LangChain, AWS Sagemaker & GroundTruth, annotation pipeline, Sklearn, Pandas, Numpy,
- **Engineering:** Python backend (Flask/Django), micro-services, distributed systems, observability, analytic endpoints
- **Style:** prototypes, tackle ambiguity with cross-silo dialogue and Amazon 6-pagers

Education

PhD in Geography, at SDSU and UCSB, 2015. Data science for social science problems with location referenced data.

Job experience

AI Engineer consultant at Wolf Games, 2023

- murder mystery story compositional grammar
- murder mystery story events service

AI Engineer consultant at Intuitive Systems, 2023

- Normalize vendor receipts fed into AMD's sales analytic pipeline
- Human-in-the-loop product design

AI Engineer consultant at SimpleLegal, 2022-2023

SimpleLegal is a legal billing analytics company.

- launched a stuck AI feature
- shifted focus from training example quantity to quality
- led offshore annotators, data scientist, and the subject-matter expert
- built SageMaker inference server

Lead Analytic Endpoint Engineer at Sight Machine, 2018-2021

Sight Machine is a manufacturing analytics company.

- analytic endpoints
- started new checklist process to lock down successful sales demos

- built distributed tracing

Lead Data Engineer at HiQ Labs, 2015-2018

HiQ Labs was a people analytics company.

- led the migration from a monolith to a micro-service paradigm
- built the scraping system

Developer at Urban Mapping, 2011-2013

Urban Mapping provided geospatial analytics to Tableau.

- CI/CD/QA pipeline
- Observability

Notable success

- For a gaming startup, I designed and built their murder mystery story generation service, starting from a greenfield design of the primitives.
- For a semiconductor analytics startup, I designed a new computer name disambiguation approach for AMD's sale analytics pipeline.
- For the Langchain open-source library, I contributed an experimental [CPAL Chain](#) - first causal LLM chain. [Tweet by LangChain](#).
- For a legal ops company, a new language AI billing feature.
- For a people analytics startup, new microservice paradigm.
- For academics, new location based human inequality metrics in [Assessing Inequality using Geographic Income Distributions](#)
- For several companies, I built observability systems.

Interesting activities

- For my side-project, I am deriving normal forms for clinical studies and murder mysteries.
- For my side-project, Nobsmed.com, I am building a new causal discovery approach to RAG to help ordinary people evaluate their medical treatment options.
- I climbed Cotopaxi (21,000 ft), survived bodyboarding Mexpipe, worked with students in Medellín, Columbia to make [ClusterPy](#), was a kids snowboard instructor at Vail Resorts, CO, was an assistant manager at Gundy's Grill in Vail Resorts, CO, was a counselor for severely emotionally disturbed children at Seneca Institute, CA.

Papers and code

- [Without cognitive empathy, your language AI performance metrics are meaningless](#)
- [Langchain PR: Causal Program-aided Language \(CPAL\)](#)

- [Work papers](#)
- [Academic papers](#)