#### **Dinesh Vasireddy**

Harvard University | Software Engineering | AI/ML | GovTech

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#### **Education**

## **Harvard University**

A.B. Computer Science, Statistics, and Government, 3.93/4.0

Cambridge, Massachusetts

Aug. 2023 – May 2027

Primary Activities: Harvard Innovation Labs (Venture Program), Harvard Data Analytics Group, HCS Tech for Social Good

#### **Professional Experience**

GovDash (YC W22) Software Engineer New York City, New York June. 2024 – *Present* 

Developing a robust AI platform for government contracting using Next.js, Prisma, TRPC, Render, and various LLMs on Azure.

- Shipped over 20 new features so far, including an analytics suite for \$50M+ confidential data, secure data exports, database efficiency on sam.gov RAG pipeline, improved content generation for proposals, and frontend overhauls as the product scaled fast.
- Building a <u>fast AI-powered action assistant</u> for GovDash's core product (in Microsoft Word and Web) to reduce customer confusion and improve product flows for finding opportunities, generating proposals, managing contracts, etc.

## Harvard Undergraduate Data Analytics Group

Cambridge, Massachusetts

Oct. 2023 – Present

Lead Data Scientist

Managed <u>high-volume consulting cases</u> for Fortune 500 clients, including Coca-Cola. Employing advanced statistical methods, including
Monte Carlo Risk Analysis, Market Segmentation Modelling, in Python/R to analyze high-volume datasets and <u>predict market risks, trends, and generate business recommendations</u> to improve high-value sales channels. Launched a Flask-based black box for market risk simulation, used by Coca-Cola's financial analysis division.

**Arkansas United** 

Little Rock, Arkansas

Oct. 2022 – Jun. 2023

Software Engineering Consultant

• Developed and launched an <u>online automated resources portal</u> AUNow (2K+ National Users, 10+ Partners, 50K Visits, Largest digital immigrant resources portal in Arkansas). Created <u>machine learning models for electoral analysis</u> and <u>social media listening</u> to develop optimized technology-related policy proposals, most notably for statewide race and ethnicity data tracking (Presented to Governor).

# **Datategy NextGen AI Solutions**

Paris, France

Data Science and AI/ML Intern

Jun. 2022 – Sep. 2022

- Developed, optimized, and deployed three new machine learning algorithms, focused on financial analysis and data management, for Datategy's PapAI Business AI Platform (20+ International Clients, \$3.6M Valuation) and contributed to company-wide strategy development for business outreach, industry expansion, and feature creation.
- Notable Client Work: Optimization of Funding Allocation for French Economy Ministry, Data Management for European Hospitals

#### Walmart Global Technologies

Bentonville, Arkansas

Software Engineering and Data Science Intern

Sep. 2021 – May 2022

- Created and deployed a global E-Commerce Demand Forecasting Model (80% Accuracy, Used by 152K Merchants, Impacts 300M+ Users,
  Optimized Sales for 6.5M+ Products) of Walmart.com sales to optimize online Apparel sales
- Used Walmart's premier ML platform, Element, to design <u>data pipelines</u>, implement <u>machine learning algorithms</u>, conduct performance analysis, and efficiently deploy internal AI products on cloud.

### **University of Arkansas SEEDS Center**

Fayetteville, Arkansas

Apr. 2021 – Jun. 2023

# AI/ML Research Assistant and Investigator

• Conducted and led <u>NSF-sponsored research</u> advised by Prof. Qinghua Li at UARK's Cybersecurity Center for Secure Evolvable Energy Delivery Systems (SEEDS) investigating the use of language learning models and machine learning algorithms (Doc2Vec, Fast.ai, Advanced BERT Models) to improve the Common Vulnerability Scoring System and effectively classify computer system vulnerabilities. Accepted for publication by TechConnect for Resilience Week 2023 in Washington D.C.

## **Independent Project Work**

#### Commonwealth.ai: Building a Structure for News [Next.js, Supabase, OpenAI]

Dec. 2023 - Present

- Built a <u>political research engine</u> that indexes and performs sentiment analysis on political articles to create <u>an efficient standard and verifiable structure for news articles</u>, enables semantic search via LLMs and RAG, facilitates instant LLM-powered structured list creation, bulk data extraction on a granular level, and supports research thread management. A high-speed research engine for extracting structured data from the treasure trove that is news media.
- 2130+ users, 12000+ articles indexed, and 15 active campaigns on our V1 product (with a few paid plans).

# Climate Neutral LLM [Flask, Google Cloud, Fast.ai, OpenAI, TensorFlow]

Nov. 2023 – Dec. 2023

• Piloted a <u>Custom LLM assistant (Used by 347 Brands) focused on generating comprehensive sustainability plans</u> by analyzing your business' core operations. Fine-tuned on international climate standards using few-shot prompting, transfer learning, and domain adaptation. Built a scalable AI system with robust data pipelines from thousands of sources worldwide, including real-time streaming data and unstructured documents. A Harvard Tech for Social Good project.

#### PolyData Electoral Innovation Network [React, Node.js, Python, TensorFlow, AWS, D3.js]

Sept. 2021 – Jun. 2023

- Developed and sold <u>a collection</u> <u>of database tools</u>, <u>AI-powered election analysis models</u>, <u>and back-office software</u> focused on optimizing political campaign operations, interpreting electoral outcomes, and understanding voter behavior in local, state, and federal elections.
- Notable Client Contract Projects (\$70K ARR): Voter Pulse: Inactive Voter Identification Model (Acquired by 8 Campaigns), Electoral Report Generator (Acquired by 4 Campaigns & Government Offices), Immigrant Resources Portal (2K Users in Arkansas), Federal Election Simulations (Presented to 10+ State Politicians), etc.

#### **Relevant Skills**

- o Technical Skills: Python, Java, R, JavaScript, HTML, CSS, Swift, C++, React, Node.js, Next.js, AWS, Google Cloud, Prisma, etc.
- Technical Areas: Data Science, AI/ML, Software Engineering, Web Development, UI/UX Design, Large Database Management
- Core Interests: Market Segmentation, Sales Optimization, Demand Forecasting, Electoral Science, Social Analysis, Governmental Operations