CHRIS VAN BUREN

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WORK EXPERIENCE

Co-Founder & CTO (Lead Engineer). Grantease, Denver, CO

Dec 2024 - Present

Bootstrapped and scaled an AI grant-writing SaaS platform to \$60K ARR in 3 months; platform produced 1,000+ NIH proposals for researchers at 30+ universities.

- Cut proposal prep time by 60%: users called it an "all-day tool" after drafting 10 grants in parallel (vs. 3 before), a 3x output improvement.
- Built resilient LLM stack with smart fallback logic, structured output recovery, and model tiering across 5 providers.
- Real-time editing platform: Built a Next.js 15 app with rich text editing, an Al grant-writing agent, Supabase auth, and full DOCX/PDF ingestion.
- Architected multi-layer citation engine with automated data parsing, cleaning and CrossRef metadata enrichment.
- Engineered hybrid semantic search via Supabase RPCs combining vector and SQL filtering.
- Modeled 200+ NIH grant rules in YAML, enabling real-time structure validation via AI and deterministic linting.
- Implemented Stripe billing, referral flow, WorkOS SSO, and self-serve onboarding for institutions.

Staff Data Scientist, Lenovo, Raleigh, NC & Denver, CO

Jul 2021 - Sep 2024

Designed and deployed ML/LLM systems across Lenovo's business units, cutting manual work and adding major customers.

- Reduced manual triage workload by **over half** with NLP & ML pipelines (spaCy, scikit-learn, XGBoost) that classified feedback and auto-routed survey responses.
- Delivered 10+ hours/week in exec time savings via a daily GPT-3-powered competitor intel briefing (web scraping + few-shot summarization).
- Built and deployed a RAG stack (Milvus + Hugging Face) adopted by 3 Fortune 500 clients for internal knowledge retrieval.
- Boosted Lenovo's generative AI brand at 6 major conferences (150K+ attendees) with a fine-tuned chatbot trained on synthetic Q&A via LoRA.
- Led development of an ALS writing assistant with sub-50ms transformer predictions tailored to personal corpora [Github].

EDUCATION

University of Texas at Austin, Graduate Al Coursework (4 courses completed)

Jan 2024 – Dec 2024

<u>Duke University</u>, B.S.E in Electrical and Computer Engineering, Certificate in Decision Science *GPA*: 3.80

Aug 2017 - May 2021

Projects

Founding Engineer, Proto-Town, Lockhart, TX

Sep 2024 - Nov 2024

Helped launch a hardware-focused startup village; secured \$180K ARR from early tenants; built a prototyping workshop.

<u>Transformer Model Ace Sequencing [GitHub]</u>

Aug 2023 – Sep 2023

Trained transformers to predict ace positions in shuffled decks, probing generalization in high-noise sequence tasks.

Autonomous Video Game Agent [Paper]

Mar 2024 - Apr 2024

Built a PyTorch imitation learning agent for real-time control in a custom video game environment.

Publications

Evaluation Considerations of Synthetic Natural Language Datasets for Question Answering Applications. TPC Technology Conference on Performance Evaluation & Benchmarking (TPC-TC 2024). *First author.*

Benchmarking Large Language Models: Opportunities and Challenges, TPC-TC 2023. Co-author with Lenovo and AMD.