

ABDUL AAHAD VAKANI

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EDUCATION

Indiana University Bloomington · *PhD in Information Science* August 2026 - May 2031
DePauw University · *Bachelor of Arts in Computer Science & English Writing* August 2022 - May 2026
Honors Program · Presidential Ambassador · Dean's List

PROJECTS

Offbrand Simulator · *Viral Management Game*

React, JavaScript, Firebase — January 2026 — ludwig.aahadv.com

- Built roguelike business simulator attracting **2,000+ organic users** in first month, featured on Ludwig Ahgren's YouTube (**165K+ views**, 1M+ subscribers)
- Engineered three-resource economy with 19+ synergistic power-ups, Firebase leaderboards, and real-time analytics
- **Shipped v2.0 within 14 days** of live feedback, patching exploits discovered during 1.3K+ organic search-driven traffic spike

CodeBoard · *Multilingual Research Platform*

Next.js, Express.js, PostgreSQL, Prisma, FastText — February 2025 - Present

- Developed full-stack community-sourced platform for collecting code-switching data with social context annotations across **176+ languages** and 12+ scripts including romanized Urdu, Hindi, Arabic, and Persian
- Integrated FastText language identification for automatic switch point detection with user verification, creating computationally usable and sociolinguistically grounded training data
- Built interactive dashboards with real-time analytics showcasing language pair trends, platform distribution, formality levels, and regional analyses using React, Tailwind CSS, and Radix UI
- Engineered flexible PostgreSQL schema supporting any language combination via Prisma ORM and Supabase integration
- **Secured IRB approval** for faculty pilot testing to validate annotation scheme for pragmatic functions (formality, audience, communicative intent); preparing findings for **ACL 2026** publication

Branches · *AI-Powered Decision Tool*

React, D3.js, Node.js, Google OAuth — September - December 2025

- Created decision tree visualizer generating weighted outcome scenarios with D3.js 3D visualization and AHP probability scoring
- Delivered as CS capstone with manual tree editing, OAuth authentication, and long-term decision tracking system

EXPERIENCE

Resident Assistant · *DePauw University* January 2025 - Present

- Support crisis management and peer mentorship for 80+ students; analyze survey data to inform residential technology needs

Information Technology Intern · *DePauw University* May 2024 - Present

- Automated IT workflows and ticketing systems, **improving resolution speed by 20%**; supported university-wide SSO transition

TECHNICAL SKILLS

Languages: Python, JavaScript, Java, C, C++, SQL, HTML, CSS

Frameworks & Tools: React.js, Next.js, Node.js, Express.js, FastAPI, D3.js, Firebase, PostgreSQL, Prisma, Git, AWS

ML/Data Science: PyTorch, TensorFlow, scikit-learn, pandas, matplotlib, FastText, Transformers, spaCy

Multilingual: Native fluency in English, Urdu, Sindhi, Hindi · 176+ language NLP system experience