

Pratham Vadhulas

prathamvadhulas@gmail.com | [LinkedIn: pratham-vadhulas](#) | [GitHub: rp-bot](#) | <https://prathamvadhulas.com>

PROFESSIONAL SUMMARY

Technology innovator with expertise in AI, full-stack development, and music technology. Specialized in data engineering for large audio datasets, machine learning models, and audio processing solutions with demonstrated success in research and client-facing environments.

TECHNICAL EXPERTISE

Programming Languages: Python, C++, Rust, JavaScript, TypeScript, Java, SQL
Programming Paradigms: Object-Oriented Programming (OOP)
Relevant Coursework: Data Structures and Algorithms, Operating Systems, Computer Architecture, Software Engineering, Machine Learning, AI, Computer Networks, Database Systems, Linear Algebra, Calculus.
Frameworks Technologies: NextJS, React, React Native, Vue.js, Three.js, NodeJS, PyTorch
Audio Music: Digital Signal Processing, Max/MSP, **JUCE**, music21, Plugin Development
Data ML: Machine Learning, **Transformer Architecture, CUDA, GPU Acceleration,** Computer Vision
IoT Hardware: Arduino, Raspberry Pi, Sensor Integration, Wi-Fi Communication
Infrastructure: Git, CI/CD pipelining, Linux, macOS, Supabase, **Firebase, AWS, GCP, Terraform,** CDN, Cloudflare Tunnels, **AI Agents**

EDUCATION

Purdue University
BS. Computer Science

Indianapolis, IN | may 2024