



Founding Staff [or Senior] Back End & Full Stack Engineer

Company Overview |

Frontier is on a mission to make hundreds of millions of critical frontline workers superhuman through a hardware and software AI voice wearable. The company, which is headquartered in Chicago and in stealth mode, has multimillion dollar contracts with the U.S. Department of Defense and just raised \$4.7M in funding from tier 1 investors, including the first investor in Oculus. The company has more than 10 of the most critical U.S. companies as paid pilot customers, including the largest U.S. steel company and two of the top five U.S. airlines. It has an extremely talented and ambitious team committed to building one of the most foundational companies of the 21st century.

Job Description |

Frontier is looking for a Founding Staff [or Senior] Back End and Full-Stack Engineer who wants to do the most important work of their life. The selected individual will own huge parts of Frontier's voice platform (that lives on the cloud and on HW and their work will have extreme impact on the productivity, safety, and comfort of the critical frontline workers and warfighters powering and protecting the world. Being scrappy, resourceful, and flexible is critical to this role and it is 100% in-person in Chicago. Expected compensation is \$180-260K base, way-above-market equity, relocation support, and good benefits. This role is ideal for someone who wants to (1) be a cornerstone member of a rapidly growing team and (2) do critically important work for an underserved end-user group, and (3) iterate rapidly on the cutting edge of voice AI.

Responsibilities |

- Design and evolve the core services that power our voice interface and communications backbone (pipecat + Daily or similar), including identity, device/user management, and secure data ingest.
- Expose clean, stable APIs for client apps and internal services; own the contracts and versioning strategy to ensure backward compatibility.
- Implement and operate real-time endpoints (WebSocket, streaming gRPC, WebRTC) and the low-latency services that move audio and messages reliably.
- Build near-real-time data pipelines for transcripts and events; index them (e.g., search/vector stores) to enable retrieval, personalization, and compliance with data boundaries.
- Automate infrastructure and delivery using infrastructure-as-code, container packaging, and a managed orchestration platform; set up health checks, autoscaling, and CI/CD.
- Establish observability and security baselines—logs/metrics/traces, alerting, audit trails, authentication/authorization, and secrets management.
- Integrate external SaaS and enterprise systems via webhooks/SDKs/streaming adapters; normalize and reconcile data into internal schemas.
- Partner with Android, hardware, machine learning, and web teams to deliver end-to-end features (login, permissions, device features, portal workflows) and step into front-end integration when needed to ship.





- Stay at absolute cutting-edge of real-time voice AI infrastructure, AI coding tools, and related areas.

Qualifications I

Required

- 5+ years building and operating production back-end services in Go, Rust, TypeScript/Node, or Python, including systems shipped behind an API gateway with clear SLOs.
- Real-time streaming experience shipping WebRTC or streaming gRPC/WebSocket services; understands backpressure, jitter/packet loss, and reliability trade-offs. Experience with cloud media platforms (e.g., Daily or similar) and/or orchestration frameworks (e.g., pipecat or similar).
- Experience with API design & contracts where you can define/evolve OpenAPI/Protobuf interfaces, version safely, and maintain backward compatibility.
- Strong PostgreSQL schema/migrations and query tuning experience and working knowledge of caching (e.g., Redis) and event/streaming systems (Kafka/NATS/SQS or similar).
- Observability experience with hands-on with logs/metrics/traces, alerting, on-call/incident response, rollout/rollback, and performance/cost instrumentation.
- Security expertise with practical OAuth 2.0/OIDC, JWT scopes, least-privilege RBAC, secrets management, and audit trails with ability to enforce tenant/row-level data boundaries.
- Comfortable building near-real-time transcript/event ingestion and indexing (search/vector stores) to enable retrieval and personalization.
- Must have ability to be qualified to work in the U.S. in less than 3 months and have no restrictions for international travel.
- Ability to commute to Frontier's Chicago office daily (relocation support in offer).

Preferred

- Voice/LLM production work configuring pipelines in pipecat (or similar), operating WebRTC SFU/TURN services, and familiarity with ASR/TTS integration and latency budgets.
- RAG-adjacent systems experience ingesting/indexing transcripts & docs into vector/search stores (e.g., pgvector/Milvus/Pinecone or similar) with attention to permissions and freshness.
- Containers & delivery experience in Docker, Kubernetes/EKS/GKE (or serverless equivalents), and IaC (Terraform/CDK) with confidence in CI/CD and progressive delivery.
- Experience profiling and optimizing end-to-end latency and cloud cost for real-time services; load/soak testing for media and streaming APIs.
- Security depth for mTLS, service-to-service auth, rate-limits/quotas, key rotation with experience designing audit-ready controls.
- Frontend/mobile touchpoint experience with ability to review and extend simple portals and Android integration (permissions, login, device features) to unblock teams.
- Ecosystem engagement contributions to relevant OSS (WebRTC/media, orchestration, LLM/RAG) or internal tooling that improved developer velocity.





Frontier Audio Labs evaluates qualified applicants without regard to race, color, religion, sex, sexual orientation, gender identity, genetic information, national origin, age, disability, veteran status, or any other legally protected characteristics.

All inquiries should be directed to pmoeckel@frontieraudio.com with your portfolio and resume.



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