# **ASHRIS CHOUDHURY**

# Al Frontend Engineer | Founder, India in Pixels (630K+ on YT)

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# **SUMMARY**

Senior AI Frontend Engineer with 6+ years building production LLM applications reaching 50M+ users. Proven track record scaling AI-powered SaaS to \$35k ARR and leading technical teams. Expert in RAG systems, vector search, and React ecosystem. Recognized creator with 630K+ YouTube subscribers and TEDx speaker.

# PROFESSIONAL EXPERIENCE

#### Founder & Al Frontend Engineer, iipmaps.com

Jul 2022 - Present | Bangalore, India

- Architected Al-powered map visualization SaaS with 22k+ MAU using GPT-4 and Firebase Vector Search
- Implemented RAG-powered semantic search delivering sub-200ms insights, now powering Coca-Cola India's regional dashboards.
- Built drag-and-drop CSV-to-map pipeline with automated data cleaning and anomaly detection
- Achieved ₹30L (≈ US \$35 k) revenue with Coca-Cola India enterprise license

# Frontend Engineer, Quilt

Nov 2023 - Apr 2025 | Remote (USA)

- Built Al-powered RFP tool helping enterprises auto-fill questionnaires using RAG-based knowledge retrieval
- Architected and implemented complete integrations layer for Google Drive, Notion, and Confluence
- Developed the core AI chat interface using React/TypeScript with real-time streaming responses
- Implemented collaborative commenting system with version history tracking across documents
- Built Python backend services for BigQuery data pipelines and Google Cloud cron jobs
- Created Firebase Functions for document processing and vector embedding generation

# Senior Software Engineer, HeadsUp

Jul 2021 - Jul 2023 | Remote (USA)

- Developed ML-powered Chrome extension analyzing customer behavior, securing \$143K Contentful deal
- Migrated legacy React codebase to Next.js 13 with GraphQL, improving TTI by 28%
- Built real-time data pipeline integrating Salesforce, HubSpot, Intercom APIs with predictive churn models
- Implemented A/B testing framework that increased user engagement by 3%

# Senior Software Engineer, BharatPe

Apr 2020 - Jul 2021 | Bangalore, India

- Spearheaded Android app rewrite in Kotlin for fleet tracking, enabling ₹27K daily operational savings
- Built geospatial visualization dashboard with React and MapBox processing 100K+ daily transactions
- Reduced app crash rate by 30% through comprehensive testing and Sentry monitoring
- Led 4-person team during critical growth phase contributing to 10x valuation increase to \$2B

#### Full Stack Developer, Qwilr

Jul 2019 - Mar 2020 | Remote (Australia)

- Developed drag-and-drop document editor features using React and TypeScript with TDD approach
- Implemented Elasticsearch-powered search across 50K+ documents with sub-second response times

# **EDUCATION**

Visiting Researcher, MIT Media Lab

Aug 2017 - May 2018

Cambridge, Massachusetts (USA)

Mixed Reality & Human-Computer Interaction Research | Pivoted to Al engineering

Bachelor of Architecture (Hons), IIT Kharagpur

2012 - 2017 | West Bengal (India)

Artificial Intelligence | Data Structures | HCI Research

# **PUBLICATIONS**

# Mathland: Playful Mathematical Learning in Mixed Reality,

CHI Conference on Human Factors in Computing System 🛚

Biased Bots: Conversational Agents to Overcome Polarization,

Oct 01, 2018

ACM International Joint Conference 2

#### **TECHNICAL SKILLS**

Frontend - React, Next.js, TypeScript, Tailwind CSS, Ant Design, D3.js, Three.js, Redux, Jest

AI/ML — OpenAI, Anthropic Claude, LangChain, Microsoft Autogen, RAG Systems, Vector Search (Pinecone, HNSW)

Backend — Node.js, Python, Firebase Functions, Google Cloud Functions, GraphQL, REST APIs, Selenium

Data/Cloud - PostgreSQL, MongoDB, BigQuery, Redis, Firebase Vector Store, AWS, Vercel, Netlify, Jenkins, Docker

### RECOGNITION

| TEDx Speaker, IIM Calcutta              | 2023 |
|---|------|
| Telling India's Story One Map at a Time |      |

Featured: News 18, Hindustan Times, Mid-Day, OdishaTV News articles and interviews featuring India in Pixels work

News articles and interviews reaturing maid in Pixers work

Awards: Kantar Information is Beautiful Awards (2018, 2019)

2019

2022

### **FEATURED AI PROJECTS**

India in Pixels, Creator & Instructor

2019 - Present

- Scaled "India in Pixels" to 630 k+ subscribers and 50 M+ views, placing in India's top 1 % of ed-tech genre.
- Authored 300+ interactive visualizations in D3.js & Python, one retweeted by Prime Minister Narendra Modi.
- Shipped a RAG-powered semantic explorer (OpenAI + Firebase Vector Search) that delivers sub-200 ms answers across 30 k-row cultural datasets.
- Built zero-touch ETL pipeline processing 30K+ cultural datasets with 95% accuracy, auto-generating shareable infographics that achieved 50M+ views
- Exposed the pipeline via REST APIs, now powering Coca-Cola India's regional dashboards.

# Shruti - Al Memory Archive for Endangered Indian Languages

2025

- Developed collaborative platform for preserving endangered Indian languages' lullabies and songs
- Implemented Al-powered audio transcription and automatic metadata generation
- Built entirely using Claude Code for rapid prototyping and deployment
- Used vector embeddings for semantic search across multilingual audio content

Al Talk to Your Clone 2023

- Built conversational Al system allowing users to chat with their past self using Facebook Messenger data
- Implemented with LangChain and HNSW vector database in early adoption, later migrated to Pinecone
- Created YouTube tutorial demonstrating personal AI clone creation with custom embeddings
- Achieved viral reach showcasing practical applications of conversational AI

Apr 20, 2018