

ASHRIS CHOUDHURY

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As a Full Stack Engineer with a pronounced focus on frontend development, I have over 5+ years of experience at startups, including BharatPe, backed by rigorous training from institutions like IIT and MIT. Known for my meticulous attention to detail and innovative solutions, I am a passionate and self-driven professional, on the quest to apply technology to make the world a better place.

HIGHLIGHTS

Frontend: React, Typescript, NextJS, Tailwind, Styled Components, Ant Design, GraphQL, Redux, d3js, p5.js, Kotlin (Android), React Native

Backend: NodeJS, Express, NestJS, Python, BeautifulSoup, cheerio, Flask, Firebase Functions

Databases: Firebase, SQL, Postgres, MongoDB, Elasticsearch, Node, Express, Python, Flask, Kibana, GraphQL

Tools/Platforms: Postman, Jenkins, Docker, Selenium, Git, Docker, AWS, Sentry, Netlify, Google Cloud

EXPERIENCE

Senior Software Engineer, HeadsUp (USA)

Jul 2021 - Jul 2023

HeadsUp is a sales tool that analyses customer data to predict user churn, retention, and conversion.

- Led end-to-end development of the HeadsUp Chrome extension, resulted in notable \$143K deal with Contentful.
- Played a pivotal role in design team deliberations, working closely with product team to revamp our legacy M3 architecture.
- Responsible for key integrations with sales tools like Salesforce, HubSpot, Intercom, Outreach, and SalesLoft.
- Acknowledged for outstanding performance through a pay increment. Concurrently, mentored junior engineers in the team.

Senior Software Engineer, BharatPe (India)

Apr 2020 - Jul 2021

BharatPe is India's leading merchant payment FinTech company. It helps merchants accept payments from customers for free.

- Led the Fleet-on-Street app development, crucial in escalating BharatPe's valuation by 10x to \$2 Bn.
- Quickly mastered Kotlin amidst an engineer shortage, leading the development of map tracking, achieved \$27K in savings
- Earned recognition as fastest contributing engineer, integrated testing and monitoring across all modules of the FoS app.
- Promoted the renaming of the FoS app to BharatPe Captains, emphasizing a user-focused overhaul of the application.

Fullstack Developer, Qwirl (Australia)

Jul 2019 - Mar 2020

Qwirl is a rich editor that allows for easy creation of marketing documents, contracts, pitches using simple drag and drop UI

- Developed key Qwirl editor features such as image and caption addition, employing test-driven development using Jest.
- Empowered efficient searching across folders leveraging Kibana and Elasticsearch.

Fullstack Developer, Shipy (India)

Aug 2018 - Jul 2019

Shipy is a CRM platform for the shipping industry designed for scheduling shipping and provide real-time monitoring.

- Rapidly mastered both frontend and backend development, implementing NestJS and using Python for data scraping
- Won the Shipy Hackathon by coming with a Spreadsheet plugin that drastically reduced onboarding teams time by 50%
- Led the modernization of legacy ProjectX by transitioning to React with TypeScript, elevating the platform's efficiency & UX.

Research Assistant, MIT Media Lab (Cambridge, Massachusetts)

May 2017 - Apr 2018

- Developed a mixed reality game environment for children to learn physics and maths concepts interactively. Programmed over 10,000 lines in C# and conducted extensive user studies with students to arrive at the final design.
- Designed hardware prototypes and trained the RNN for AlterEgo - a wearable that estimates what someone is thinking on the basis of 36 micro-vibration sensors on the face. Developed a proof of concept to connect the internet to the mind.

EDUCATION

Visiting Researcher, MIT Media Lab (Cambridge, USA)

Aug 2017 - May 2018

Classes taken: Cognitive Augmentation | StartMIT Entrepreneurship 101 | Depolarisation by Design | Tangible Interfaces

Bachelor of Architecture (Hons), Indian Institute of Technology (IIT) Kharagpur

Jul 2012 - Jul 2017

Classes taken: Programming and Data Structures | Artificial Intelligence | Operations Research | Innovation Management

PUBLICATIONS

M. Khan, F. Trujano, **A. Choudhury**, P. Maes, "Mathland: Playful Mathematical Learning in Mixed Reality", Proc. ACM SIGCHI Conference on Human Factors in Computing Systems | **CHI 2018 Extended Abstract**

T. Dingler, **A. Choudhury**, V. Kostakos, "Biased Bots: Conversational Agents to Overcome Polarisation", ACM Conference on Pervasive and Ubiquitous Computing | **UbiComp 2018**

A. Choudhury, A. George, "Computational Planning Statistical Approach to Site Zoning Using Method Of Overlays" | **2015**

SELF PROJECTS

Creator, India in Pixels

Mar 2019 - Present

- Created over 300+ infographics using public data about India using d3js and Python. Retweeted by the PM Narendra Modi
- Singlehandedly grew YouTube channel to 430K+ subscribers. Interviewed by Hindustan Times, News18, Mid Day.

Creator, iipmaps.com

Jul 2022 - Present

- Built a map maker that allows users to easily convert public data instantly to easy-to-understand shareable infographics
- +14,000 users, 23 paid users, business partnership with Coca Cola India | INR 480,000 in revenue in just three months
- Among top 10% applicants in YC 2023 | Site built using React, d3js, Firebase, QGIS

Personalised AI Chatbot

Jul 2023

- Utilized personal information, OpenAI embeddings, and GPT-4 to train an AI model. This showcased the innovative use of text embeddings and voice cloning technology for tailored content creation and interactive AI experiences.

Learn Data Visualisation with India in Pixels (Unacademy Live Cohort Class)

Sep 2022

- Orchestrated a live cohort for 340+ students with Unacademy, a six week course to introduce beginners to data storytelling
- Fastest growing course on Unacademy platform with hands on approach of using data portraits, sonification, dashboards

Data Sonification of India's UPI Transactions (P2P payments) data

Apr 2022

- Developed an engaging animated infographic illustrating the impact of UPI and digital payments through data sonification.
- Achieved notable recognition from Prime Minister Narendra Modi for the innovative use of sound in data storytelling.

Network Visualisation of Facebook Clusters

Apr 2018

- Crafted an efficient Python script to automate extraction of mutual friends data from 2000+ Facebook profiles.
- Utilised Force Atlas Algorithm on Gephi to visualise friendship clustering, analysing susceptibility to echo chamber creation
- Received recognition in the Towards Data Science journal and the Kantar Information is Beautiful awards 2018.

ESUM - Physiological Feedback Driven Urban Planning (ETH Zurich)

May 2015

- Built a machine learning model to predict the emotional response of people to a city's spatial and environmental design
- Implemented OpenCV HAAR Cascade Algorithm to blur human faces from stereoscopic street footage in Zurich

AWARDS AND ACHIEVEMENTS

Guest Speaker, iFest, DA-IICT (Gandhinagar)

Nov 2022

Invited as a featured guest at DA-IICT Tech Fest, engaging with students in a Q&A session on exploring interdisciplinary fields

Speaker, Narrating a Nation Through Numbers, Outlier Conference (Poland)

Oct 2021

Delivered a keynote presentation at Outlier 2021, a global dataviz conference, emphasising the role of data visualisation in amplifying underrepresented voices and perspectives.

News18 | This Coder is Re-imagining the Composition of India With Maps of Visual Data

Aug 2021

Featured in News18's Independence Day special edition, highlighting my work with 'India in Pixels'

Speaker, Processing Community Day 2019 (Bangalore)

Feb 2019

Invited to present my project 13x27, visualisation of tweets post the Section 377 verdict by the Supreme Court of India

All India Rank 1, National Institute of Design Exam (Bangalore)

2019

All India Rank 1 in the Game Design stream and All India Rank 3 in the Information Design stream of NID

Kantar Information is Beautiful Awards (2019, 2018)

2018, 19

Projects "Visualising my Facebook Network Clusters" and "Indecoded: Animated Cartogram of India" showcased in IIB Awards

MIT Sandbox Fund for Entrepreneurship MIT

2018

Awarded \$1000 for developing Pool-ed, a Chrome extension that offers rewards to complete MOOCs.

Winner, GES Hackathon (Chatbots for Social Impact) IIT Kharagpur)

2016

Won the GES Hackathon (out of 100 teams) for developing "Sparreo : Chatbot to incentivise lost and found systems in city"

National Finalist General Electric Edison Challenge, Bangalore

2016

Top-25 in India - Developed Trafrix - a route planning system to solve city's traffic issues via gamification incentives.