# Ankit Chaurasia

### EXPERIENCE

# Senior Software Engineer, Wadhwani AI

Mumbai, India

All-Rounder (Design, Architect, Develop) – Backend, Frontend, Partner Integration

Jan 2019 - Present

- Hired and leading engineering teams across multiple projects in the healthcare and agriculture domains.
- Integrated pest management solution
  - \* Designed, developed and deployed a pest management system which runs a pytorch based model on the phone/cloud to identify the harmful pests, alert farmers about infestation and reduce crop loss in cotton farming. Currently being used by over 11,000 farmers.
  - \* Developed data pipeline for data collection[ODK], annotation [LabelMe], model deployment (online on-cloud and offline on-device), analytics dashboard along with open APIs for third-party integration and Django backend.
  - \* Part of the team that won a \$2 million grant as part of the Google AI Impact Challenge [link] offered to only 20 teams worldwide, becoming the only team from India to do so and featuring in Google I/O and Google for India.
- Leading engineering effort for annotation studio which is data(artefacts and annotation) management and
  job orchestration platform to manage, schedule and orchestrate annotation job across multiple annotation
  vendors using Apache Airflow, FastAPI and React. The annotations are used for model training and
  performance decisions.
- Reduced the video buffering time by 75% on open-source CVAT annotation tool by adding Redis cache to cache the frames during data ingestion.
- Engineered various micro-services being used by multiple teams with over 0.5m event till date like authentication and authorization service, geospatial directory and emailing-service using Django, AWS SES, OAuth 2.0, AWS cognito and Fargate.
- Built a covid-19 mobility dashboard integrating with COVID-19 Mobility Data Network and Facebook
  Data For Good which enabled 11 state government authorities in India with actionable insight to
  optimize emergency protocols in line with epidemic spread and identifying high movement areas.

# Software Development Engineer, DreamVu

Hyderabad, India

Prototype building, Research and Deployment

Dec 2017 - Jan 2019

• Developed end to end modular video acquisition and processing software for VR/AR and machine vision applications (for in-house camera) along with SDK for third party integration which helped to secure an angel funding of \$ 0.5 million from SRI capital.

### Software Engineer, AapkaPainter

Bangalore, India

All-Rounder (Design, Architect, Develop) – Backend, Frontend

Aug 2016 - Nov 2017

- Joined as a founding team member and developed the Customer Relationship Management (CRM) and task management system along with sales and marketing automation platform using Codeigniter.
- Created the customer and vendor transaction module by integrating with payment gateway (Razorpay). Transaction of more than INR 10 million on monthly basis across the user base.
- Built a Flask Restful API to extract room and wall measurements from floor plan images using Google Cloud Vision, Ocropus and Tesseract in parallel.

### Software Intern, Almabase

Bangalore, India

Internship

March 2015 - June 2015

• Developed uber ride remainder web app to book the cab at a specified date-time and notify the user.

- Web crawler to crawl relevant news using using newspaper API, python3 along with beautiful and regular expression matching to fetch alumni and their news on the web.
- Successfully extracted single pictures of alumni along with name from scanned archived alumni documents using Viola Jones algorithm for face detection. Used Cascade Classifier class to detect faces in video stream in OpenCV.

#### SKILLS

- Concepts: Data Structures and Algorithms, Databases, REST, System Design, Data pipelines, Geo-spatial data, OS concepts, DevOps, SEO, SEM, Deployment, Authentication and Authorization, Version Control
- Languages: Python[proficient], C++[proficient], C[intermediate], Java [beginner], PHP[intermediate], JavaScript[intermediate], matlab[intermediate], Bash, LATEX
- Framework and Libraries: Apache Airflow, Django, FastAPI, Flask, OpenCV, AWS Sagemaker, AWS Fargate, WordPress, Codeigniter, OAuth 2.0, AWS Cognito
- Databases: SQL, MySQL, MongoDB
- Miscellaneous: Git, Github Actions, Docker, AWS, Google Compute Engine, Swagger, Postman, Apache2, NGINX, HTML, CSS
- Project management and hiring: Team management, SDLC, Agile, Waterfall, Sprint planning, Hiring, On-boarding and mentoring team

# Publications/Manuscripts

Pest management in cotton farms: an AI-system case study from the global South

[paper]

Aman Dalmia, Jerome White, **Ankit Chaurasia**, Vishal Agarwal, Rajesh Jain, et al. ACM SIGKDD Conference on Knowledge Discovery and Data Mining (KDD) 2020

A real-time travel planning algorithm via multimodal transport network for ATIS

[thesis]

Ankit Chaurasia, Karnika Agarwal, Kshitij Kadane Supervisor: Dr. Rashmi Ranjan Rout, B. Tech thesis 2016

#### EDUCATION

•	National Institute of Technology Warangal	Warangal, India
	Bachelor of Technology (B.Tech) in Computer Science and Engineering	2012 - 2016
•	Indian School of Business, Hyderabad	Hyderabad, India
	Technology Entrepreneurship Programme	2014-2016
•	SOS Hermann Gmeiner Higher Secondary School	Bharatpur, Nepal
	Grade 12	2011

#### ACHIEVEMENTS

# Winner Design Challenge, ISB Hyderabad

Hyderabad, India /link/

User Research, Design, Development, Partner Integration

- Founded an award winning startup which built a real time position reporting system for buses without using GPS.
- Pitched our idea to Telangana IT minister and received a seed funding offer from TSRTC(Telangana State Road Transport Corporation)

# Extracurricular and Leadership

# • Coordinator, Quality Control And Management Technozion 15

- Got ISO 9001:2008 certification and UNESCO patronage for Technozion 15, South India's second Largest Technical fest. The fest saw a revenue of over 1.5Crore INR(200kUSD) from sponsorships and events.
- Was responsible for leading, coordination, quality control, risk management, blogging and management for various 150+ events during Technozion 15
- More than 70 hours of teaching community service in local underrepresented schools as part of Teach for India.