

# Nana Wang

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## PROFESSIONAL SUMMARY

Strategic AI leader with 8+ years building video ML systems at scale. Delivered high-impact solutions driving engagement through advanced computer vision and recommendation algorithms. Proven team leadership aligning technical initiatives with organizational objectives.

## EXPERIENCE

DIRECTV

Los Angeles, CA

Principal Data Scientist & Technical Lead, Video Analytics

Dec 2021 - Present

- 2022 Led strategic vision and execution for AI-driven video intelligence on a streaming platform with 3M+ subscribers, collaborating with cross-functional teams to enhance editorial content delivery.
- 2022 Increased video content platform engagement by 36% through semantic analysis and behavior pattern insights, aligning AI initiatives with consumer product development in a media context.
- 2022 Developed a computer vision auto-tagging system that reduced manual effort by 85% and improved content discovery by 40%, demonstrating practical applications of AI technologies.
- 2022 Implemented video quality assessment models that reduced streaming issues by 40%, enhancing viewer retention on underperforming devices and supporting editorial operations.
- 2022 Secured \$2.5M funding for next-gen video roadmap by fostering partnerships with Product, UX, and Content teams, showcasing leadership and strategic alignment of AI initiatives with business goals.

## EDUCATION

JOHNS HOPKINS UNIVERSITY Baltimore, MD

MS in Artificial Intelligence 2018-2023

Specialized in Computer Vision & Deep Learning with a focus on video understanding, aligning with AI technologies in media

Conducted research on practical applications of AI in media contexts while collaborating with cross-functional teams

Developed advanced AI models for video content analysis, enhancing editorial workflows

UNIVERSITY OF MARYLAND College Park, MD

MS in Finance 2012-2014

Acquired strong analytical skills applicable to data analysis and consumer product development

Gained insights into strategic decision-making and business acumen, relevant for aligning AI initiatives with organizational goals

UNIVERSITY OF NOTTINGHAM, CHINA CAMPUS Ningbo, China

BS in Finance 2008-2012

Graduated with First Class Honours, GPA 4.0/4.0, demonstrating strong academic performance and dedication

Developed foundational skills in data analysis and strategic thinking, supporting editorial and AI integration

## SKILLS

**Technical Skills:** AI technologies, Data analysis, Machine learning applications, Consumer product development, Content understanding, Video analytics, Large-scale ML

**Soft Skills:** Leadership, Strategic mindset, Cross-functional collaboration, Executive communication, Advocacy for AI ethics

**Other Skills:** Editorial operations, Decision-making, Organization, Responsible AI usage

# PROJECTS

## SERVERLESS DOCUMENT PROCESSING SYSTEM

Designed and delivered a serverless full-stack system using AWS services (Lambda, S3, EC2, DynamoDB, API Gateway) and ReactJS, with TypeScript and AWS CDK for infrastructure as code, demonstrating advanced technological solutions in a media context.

Implemented DynamoDB-triggered Lambda functions for automated EC2 instance provisioning and script execution, achieving a seamless file processing workflow with cost-efficient cleanup, while adhering to AWS security best practices, showcasing leadership in AI technology integration.

## CAMPING ADVISOR PORTAL

Integrated VisualCrossing Weather API and Google Maps API for data-driven campsite discovery, leveraging AI and data analysis to enhance consumer product development.

Utilized Neo4j Graph Database and ExpressJS to present meteorological insights, demonstrating the practical application of AI technologies in consumer-facing media products.

## ACCOMMODATION WEBSITE

Developed an Airbnb-like housing app using React, Django, and PostgreSQL, achieving top 10% ranking for user-friendly design and fake comment detection, highlighting data analysis and machine learning applications in consumer product development.

## E-COMMERCE WEBSITE

Developed a functional lightweight e-commerce website using the MERN stack, focusing on scalable design and foundational full-stack development practices, relevant to media and editorial contexts.

## CLINICAL REMINDER BACKEND

Developed a clinic reminder system's backend in three days using Spring Boot, Spring MVC, and Spring Data JPA, featuring RESTful APIs for managing patient information and sending reminders, demonstrating leadership and rapid development capabilities.

## UNITY(C#) GAME DEVELOPMENT

Led a team to win the XXX Award at XXX Game Jam with a Unity-built game, and independently developed and released a 3D adventure game, showcasing leadership and strategic mindset in AI-driven media applications.