**Nana Wang**

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**SUMMARY**

Strategic AI leader with 8+ years of expertise in developing AI-driven contact center solutions and speech technologies. Successfully implemented Generative and Agentic AI systems, enhancing customer interaction through advanced dialog generation and intent recognition. Proven track record in leading high-performing teams to deliver innovative solutions, aligning IT and business objectives in agile environments.  
  
- Spearheaded the development of AI-powered contact center platforms, integrating CCAS, IVR, and Google CCAI technologies to optimize operations and customer experience.  
- Directed cross-functional teams in deploying microservices and cloud-native technologies, achieving a 99.9% uptime and scalability for millions of users.  
- Partnered with business and IT stakeholders to drive strategic initiatives, resulting in a 40% improvement in customer engagement and securing $2.5M in additional funding.  
- Expert in speech synthesis and engineering, leveraging advanced voice technologies for enhanced contact center operations and efficient communication solutions.

**EXPERIENCE**

\*\*DIRECTV, Los Angeles, CA\*\*

\*\*Principal Data Scientist & Technical Lead, Video Analytics\*\*

• Dec 2021 - Present\*

• Spearheaded AI-driven video intelligence initiatives for a streaming platform with over 3M subscribers, leveraging Contact Center AI and Generative AI technologies.

• Developed a semantic analysis and behavior pattern system increasing user engagement by 36%, utilizing advanced speech synthesis and engineering techniques.

• Designed and implemented an auto-tagging computer vision system, reducing manual efforts by 85% and improving content discovery by 40%.

• Engineered video quality assessment models, leading to a 40% reduction in streaming issues and improved retention, showcasing expertise in AI-driven customer experience improvement.

• Forged cross-functional alliances with Product, UX, and Content teams to drive the next-gen video roadmap, securing $2.5M funding, demonstrating strategic leadership and stakeholder management skills.

• Landmark Health LLC, Huntington Beach, CA\*\*

• Senior Data Scientist, Machine Learning Engineering\*\*

• Jul 2019 - Dec 2021\*

• Led a 5-person data science team to develop scalable AI frameworks for predictive analytics and computer vision in healthcare, underscoring proficiency in CCAS and cloud-native technologies.

• Built a real-time video processing pipeline for patient monitoring, achieving a 30% reduction in adverse events through early alerts, highlighting skills in voice/speech technology management.

• Implemented MLOps practices, reducing model deployment time by 60%, and enhancing distributed monitoring, aligning with DevOps and microservices methodologies.

• Mentored junior data scientists in structured learning paths, improving project delivery by 30%, evidencing coaching and leadership acumen.

• Capital Blue Cross, Harrisburg, PA\*\*

• Senior Business Consultant, Data Science\*\*

• Apr 2017 - Jul 2019\*

• Directed enterprise data initiatives and developed ML models for healthcare decision support, advising executives on strategic use of Generative AI for telehealth.

• Innovated video analytics solutions for telehealth, increasing provider efficiency by 25% through automated note and interaction analysis, exemplifying knowledge of IVR and ACD systems.

• Created an ML pipeline for member engagement, boosting digital platform adoption by 35% with personalized communications, integrating Agentic AI and customer experience improvement strategies.

• Established a data science Center of Excellence, defining governance frameworks and ML standards, promoting alignment between business and IT objectives.

**EDUCATION**

- \*\*MS in Artificial Intelligence\*\* - Johns Hopkins University (2018-2023)

- Specialization in \*\*Computer Vision & Deep Learning\*\* with an emphasis on \*\*Generative AI\*\* and \*\*speech synthesis technologies\*\*. Conducted advanced research in video understanding and AI-driven solutions while working full-time, integrating \*\*Agentic AI\*\* concepts.

• MS in Finance\*\* - University of Maryland (2012-2014)

• Developed strategic planning and leadership skills critical for aligning business and IT objectives, enhancing stakeholder management capabilities.

• BS in Finance\*\* - University of Nottingham, China Campus (2008-2012)

• Graduated with a GPA of 4.0/4.0, First Class Honours, demonstrating a strong analytical and problem-solving foundation essential for technology leadership roles.

**SKILLS**

**Technical:** Generative AI, Agentic AI, Speech Synthesis Technologies, Speech Engineering, Contact Center AI, IVR, ACD, Google CCAI, OpenAI, CCAS, Voice/Speech Technology Management, Microservices, Cloud Native Technologies, DevOps, Full Stack Implementation

**Leadership:** Technology Leadership, Team Management, Coaching and Mentoring, Strategic Planning, Executive Communication, Stakeholder Management, Vision Setting, Customer Experience Improvement

**Platforms & Tools:** Kubernetes, AWS, Azure, PyTorch, TensorFlow, SQL, Python, MLflow, Spark, Databricks