Nana Wang

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**Summary**

* Data Science leader with 9+ years of experience driving technical innovation and scaling analytics platforms.
* Proven track record of leading cross-functional teams. Built and mentored teams of 10+ data scientists, achieving $6M+ annual impact through ML innovations
* Securing executive buy-in for transformative AI/ML initiatives in streaming media and healthcare.
* Drove analytics projects, cutting rebuffering by 25% for over 2M users via innovative KPI strategies.
* Championed 80% AI adoption at DIRECTV, earning C-level support across 3 vendor lines, boosting efficiency.

**Experience**

**Principal Data Scientist Dec 2021 - Present**

DIRECTV LOS ANGELES, CA

Top quartile PayTV video distribution platform, Customer Experience & Research Department (CX &R)

**Project**: Generative AI-Powered Generative Resolution Model June 2024 - Present

* Spearheaded generative AI resolution model and reduced call back rate by 20%, impacting 8000+ agents
* Secured C-level leadership support for building north-star resolution metric and revolutionized call center KPIs

**Project**: Consumer-Centric Engineering KBIs January 2022 - December 2022

* Achieved 25% reduction in average rebuffering time within 3 months of implementing new KPIs
* Reduced app crashes by 40% on under-diagnosed platforms, boosting stability for 3M+ DIRECTV users.
* Led cross-functional team to implement streaming quality KPIs impacting 2M+ users

**Project**: transformed call-center KPIs, saving annual $2M+, impacting 8000+ agents

* Lacking standard and clearly defined resolution of a call, ambiguities in existing KPIs
* Initiated and secured buy-ins from various senior leaders in call centers, analytics, and IT
* Redefined a suite of context-driven call-center KPIs, reduced repeats, transfers and disconnects
* Enhanced agent coaching through context-driven, actionable metrics

**Project**: built 23 new metrics for marketing-owned churn models, increased accuracy by an absolute 2%

* Urgently required the development of new detractor models for churn prediction
* Spearheaded the project delivery and execution in two months, right after joining healthcare
* Raising churn prediction accuracy by an absolute 2%, increased CX&R department impact

**Sr. Consultant, Data Science Jul 2019 - Sep 2021**

Landmark Health LLC Huntington Beach, CA

Part of United Health Group, nation-wide in-home care for high-risk patients, Analytics Department **Promotion**: Sr. Analyst to Sr. Consultant (Apr 2020 – Jul 2021)

Team Leads and Management

* Led ML team developing predictive models for 500K+ patients, reducing ER visits by 15%
* Mentored 5 data scientists, enhancing risk model accuracy by 30% and boosting team efficiency by 20%.

**Project**: reduced unnecessary hospital admission by 14%, impacting 3K+ patients, resulting $6M savings

* Existing predictive models’ performance hindered by outdated methodologies and skills
* Rebuilt Inpatient Re-Admission Prediction model, boosting accuracy by 30%
* Defined actionable Inpatient Admission risk drivers, reducing IP visits by 14%, ER visits by 20%

**Sr. Business Consultant Apr 2017 - Jul 2019**

Capital Blue Cross Harrisburg, PA

Subsidiary of BCBSA, central-Pennsylvania healthcare insurance company, Analytics Department

**Promotion**: Business Consultant II to Sr. Business Consultant (Sep 2018 – Sep 2019)

* Built scalable ETL pipeline processing 10TB+ monthly data across 15 sources with 99.9% uptime
* Led 8-person cross-functional team managing 100+ healthcare metrics with 100% compliance
* Streamlined audit processes by 50% through implementing an advanced automated validation framework

**Project**: Enterprise Regulatory Reporting Framework March 2016 - December 2017

* Implemented robust data validation system slashing manual review time by 60%, enhancing efficiency
* Established enterprise-wide reporting standards, collaborating with 5+ teams, enhancing accuracy by 30%

**Data Analyst & Data Architect Oct 2014 - Feb 2017**

Pennsylvania Department of Education Harrisburg, PA

State government for education, state-wide educator dashboard support team within IT department

**Project** : Platform Migration October 2014 - June 2015

* Architected migration from vendor to in-house platform, processing 1M+ daily student records
* Developed robust real-time dashboards for 500+ schools, achieving 99.9% uptime and significant insights.
* Optimized system performance reducing latency by 60% and saving $400K annually
* Spearheaded migration project at PA Dept. of Education, slashing infrastructure costs by 40% annually.
* Led automation of testing framework, boosting efficiency by 30% and achieving 98% test coverage.

**Education**

MS in Artificial Intelligence, Johns Hopkins University, US 2018-2023

* Complete 18 courses with a focus on AI, ML and DS while working full-time

MS in Finance, University of Maryland, US 2012-2014

BS in Finance, University of Nottingham, China 2008-2012

* First Honors Degree, GPA 4.0, Dean’s Scholarship (top 5%)

**Technical Skills**

Python, R, SQL, Git; Machine Learning, Artificial Intelligence; Tableau, Power BI

Scikit-learn, TensorFlow, PyTorch; NLP, A/B testing, multivariate tests, experiment design

ETL, Data Engineering, Cloud platform Azure/AWS, Databricks, Snowflake