

ROHAN MANOJ THAKKAR

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Seattle, WA
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EXPERIENCE

TWITTER, Seattle, WA

Senior Machine Learning Engineer (Feb '22 - Present)

- Launched cloud-based **continuous training & evaluation** pipelines for **Recommended Notifications**
 - Time to **train** neural network-based prediction models reduced by 95% (24+ hours to 1 hour)
 - Time to **evaluate** neural network-based prediction models reduced by 80% (4+ hours to 45m)
 - Online performance improved by 25% within 1-month of launch (PR-AUC 0.35 to 0.45)
 - Online traffic **serving** latency reduced by 90% (100-200 ms to 5-10 ms)
 - Number of oncall incidents reduced by 66% (3x/week to 1x/week)
 - All the above gains while keeping cost at or below par
 - Reduced the compute & storage costs for 3 feature aggregation jobs by 60% while increasing speed by 50%
 - Mentored 3 FT engineers (SWE 1, SWE 2, Sr. MLE) & managed 1 SWE intern
- Technologies:** GCP, Kubeflow, Tensorflow, TFX, Python, Apache Beam, Dataflow, Airflow

ZILLOW GROUP (ZG), Seattle, WA

Machine Learning Engineer (Jan '20 - Feb '22)

- Created a new **marketing engine** to automate multivariate experimentation & optimization across ZG
 - Onboarded two marketing campaigns for a collective annual revenue of \$15M+
 - Collaborated with scientists, engineers & PM to launch ML models at 100M+ user scale
 - Time to launch new ML models reduced by 85% (2 weeks to 2 days)
 - Time to retrain new ML models reduced by 85% (1 weeks to 1 day)
 - Time to perform feature selection & hyperparameter tuning reduced by 85% (1 week to 1 day)
 - Time to launch automated scoring & measurement of ML models reduced by 99% (1 week to 1 hour)
 - Created an ingestion service to export all user scores & experimentation decisions to 4 ZG platforms daily
 - Launched & maintained AWS **infra** for a team of 15+ to prototype & productionize big data workloads
 - Sustainable process for creating & using custom AMIs to save ~12% in AWS costs (~50k/year)
 - Automated backup & restore to prevent deletion of work saved on EMR during restarts
 - Jupyter notebook launching script with preinstalled packages & users tagged on resource manager
 - AWS roles with necessary datalake permissions, cluster monitor, Git support & more
 - Added features for **Facebook Ads** Insights ETL & cut down FB dynamic costs by 30% via dynamic dedup
 - Kickstarted & led team's **oncall** processes, including weekly handoff meetings & grooming OPS tickets
 - Led ~50% of team's **Sprint** planning & **Retro** w/ stakeholder communication for key timelines & risks
 - Mentored 2 full-time peers (MLE & Applied Scientist) & 1 summer intern (eventually FT Applied Scientist)
 - Published [Zillow 2020 AI Forum recap](#)
- Technologies:** Airflow, Python, Spark, AWS, Hive, Terraform, Jupyter, Facebook Business

VMWARE, Palo Alto, CA

Member of Technical Staff (Jun '17 - Jan '20)

- Launched data pipelines, reporting, analytics & predictions for insights into engineering productivity metrics
 - Mentored 2 full-time engineers & 1 summer intern (eventually FT engineer)
- Technologies:** Python, Bash, SQL, NoSQL, YAML, Tableau

CYANOGEN, Seattle, WA

Software Engineering (Jun - Dec '16)

- Co-developed 2 cloud-based ML services (App Recommender & NewsCard ranking)
 - Created the end-to-end data pipeline from data extraction to knowledge graph publishing for the above
- Technologies:** AWS (Kafka, S3, TitanDB), Python, Bash, D3.js, HTML, CSS

EDUCATION

M.S., University of Washington (UW), Seattle, WA

Information Management (Sep '15 - Jun '17)

B. Eng., University of Mumbai, India

Computer Engineering (Aug '11 - May '15)