

Shashank S

Data | Product | Design

contact@knhash.in • knhash.in • linkedin.com/in/knhash • github.com/knhash

PROFESSIONAL EXPERIENCE

Glance, InMobi

Machine Learning Engineer 3

2022.07 – present

- Design and develop a hierarchical recommendation system Ø, modelling for the proportion of modalities based on user affinity as the first layer; build on ideas from Multi Armed Bandits(v1), Elo Ratings(v2)
- Develop a clustering based Look-alike model for sparse users, increasing engagement by 5%; moving users to "dense" faster
- Explore diverse ML models, including User-level Logistic Regression, Reinforcement Learning with MABs, Probability State Machines, Popularity, and Linear models
- Direct a high-impact team, delivering recommendations to 100M+ DAUs

 ø under 500ms latency, across two prominent OEMs.
- Lead Automation Platform for ML systems, implementing production-grade practices \mathscr{O} , Metrics (Neptune) setup, system re-architecture, Model Controller (profiling, optimization), pipeline optimizations, and dashboarding (Superset, Tableau).
- Other projects: Event-driven Personalization using PySpark Structured Streaming, CGen, and Events Framework across various versions.

Data Scientist 2 2021.05 – 2022.06

- Full Stack Data Scientist involved in: design systems, data engineering, model building, deployments, monitoring and experimentation.
- Build a graph based consumer-creator recommendation system, serving a million daily active users
- Design and deploy a GBM based image recommendation system for a cohort of 10Mn DAU, operating under 50ms latency
- Automated quiz generation over live video stream in real-time; PoC on YouTube Live Streams

Bright Money \mathscr{D}

Data Scientist 2021.01 – 2021.04

- Design and productionize the flagship Debt Manager an end-to-end AI system that analyzes the finances of an agent, collects the money required in a distributed fashion when affordable, pays the minimum dues of the credit cards; all the while maintaining the state of all cards and payments.
- Build the system on AirFlow and Django to serve 10's of thousands of users, with close to \$100k worth of transactions flowing through the system every day.

Junior Research Scientist 2019.06 – 2020.12

- Founding Data Scientist, involved in all things Data Science
- Various zero-to-one products like Bills identification, affordability prediction, overdraft prediction, liability inferences
- EDA, time-series analysis, various predictive models (income, expense, balance, affordability, overdraft), segment analysis, user behaviour tailoring
- Work with product to optimize for metrics like retention, activation, monetization

PUBLICATIONS		
Automated Debt Management Patents, USPTO Foundational work leading up to the patents US20220261886A1 Ø and US20230075411A1 Ø	2021	
DL Segmentation and Quantification of Meibomian Glands, Biomedical Signal Processing and Control Present a strategy for segmentation of Meibomian glands using Convolutional Neural Networks.	2019	

EDUCATION

Bachelor of Engineering, Computer Science and Engineering,

2014 - 2018

Sir M. Visvesvaraya Institute of Technology

- First Class with Distinction
- Electives: Pattern Recognition; Artificial Intelligence; Clouds, Grids and Clusters
- Thesis: Image Regeneration with Generative Models $\mathscr Q$

PROJECTS	
Dark Money, the personal finance dashboard you need ⊗	2023.12
Color Mood, find your favourite color of your current mood ⊗	2023.08
diffAKI, pictionary, with Stable Diffusion ⊗	2022.09
Wazir, the general purpose image and text combinator \varnothing	2023.02
Ghost Game, multiplayer game where you don't complete the word. ⊗	2021.07
Image Regeneration w/ Generative Models, semantic Inpainting ⊘	2018.05
Pretty Pixel, manipulate a 3D playing field of stars ⊗	2017.07
Souffleur, smart speech prompter while on stage \mathscr{D}	2016.01

CERTIFICATES

- Neural Networks and Deep Learning ∂
- ML Stanford University, Coursera 🔗
- Android Developer Nanodegree, Google, Udacity ${\mathscr O}$

EXTRACURRICULARS

Volunteering

- Section Leader for Code in Place, Stanford University
 - 2021 Ø, 2023 Ø

Honours

- ACM ICPC 2015 Ø , Honorable Mention
- Letter of commendation by Minister of HRD \mathscr{D} , Kendriya Vidyalaya, AISSCE (12th Board)