

# Anjan Goswami

San Francisco Bay Area, CA

Objective: *AI, Search, and Data Executive*

goswami.anjan@gmail.com

<https://www.linkedin.com/in/goswamianjan/>

<https://www.smartinfer.com/>

## Executive Summary

Accomplished AI and Engineering Leader with 20+ years of experience in 0-to-1 product development for enterprise and consumer platforms. With deep expertise in generative AI, NLP, computer vision, and advanced search architectures, I build and lead cross-functional teams to overcome complex challenges, drive measurable business impact, and secure sustainable competitive advantages.

## Key Achievements

- **LLMs for Microsoft PowerPoint (2024–Present):** Led design and development of prompt-based AI solutions and fine-tuned large language and reasoning models for PowerPoint slide deck creation (on-brand, grounded) and comprehension—doubling user engagement. Built and scaled the AI & Data team.
- **ML, DL, and LLMs at Adobe (2019–2023):** Developed semantic parsing for PDFs; implemented a model-distillation framework for fast and cheap object detection, built RAG systems for summarization and Q&A (Acrobat Assist). Enhanced Adobe Stock image search recall and diversity via CLIP-based models and a k-sparse autoencoder; architected an AI-powered audience discovery platform (Segment AI).
- **ML and DL at Salesforce (2016–2019):** Launched recommender systems, spam detection, Q&A features, chatbots, enterprise search, and news feed ranking for Community and Service Cloud—achieving a 20%+ engagement lift; accelerated AI adoption with BERT and Transformer-based solutions.
- **Commerce Search at Walmart (2014–2015):** Led 80+ engineers and scientists to build ML-based ranking/recall models, query understanding systems, Markov model-based spell correction, and ML-based type-ahead systems from scratch—boosting revenue by 23% and sales by 17%.
- **Recommender Systems for UpWork (2013–2014):** Built an end-to-end, near real-time contractor recommender system (hiring rates +4%); established a product analytics team and built an experimentation platform, contributing to M&A due diligence.
- **Commerce Search at eBay & Amazon (Earlier Career):** Transitioned eBay to the ML-based Cassini search platform (+6% revenue) by architecting Cassini's ranking module and an image-search system for fashion; at Amazon A9, developed global ranking infrastructure and implemented new relevance evaluation systems.

## Areas of Expertise

- **AI, ML, Information Retrieval:** Generative AI, LLMs, NLP, computer vision, recommendation systems, advanced search technologies.
- **AI Strategy & Execution:** Creating and leading AI roadmaps, delivering scalable products, and transforming cutting-edge technology into impactful solutions.
- **AI Systems Architecture:** Designing cost-efficient, high-performance platforms for AI, search, and data with an emphasis on integration and operational excellence.
- **Leadership, Ethics & Innovation:** Building and scaling high-performing AI teams, championing responsible AI practices, and managing cross-functional alignment.

## Professional Experience

### Head of AI and Data, Microsoft PowerPoint

(March 2024 – Present)

- Developed Office Group and PowerPoint's ML strategy and roadmap (presented to C-level executives). Led development of fine-tuned LLMs to generate on-brand, grounded presentations and assess text, image, and design quality.
- Architected multi-stage, prompt-based AI solutions for Copilot (e.g., a “narrative builder”) to generate presentations from user prompts and user-provided documents; improved prompt design increased engagement by 20%.

- Built and scaled a cross-functional AI team; established a data science function for product analytics and user-growth insights, with UI initiatives boosting discovery and usage by 20%.
- **Responsible AI & Committee Engagement:** Participated in the Responsible AI (RAI) and deployment safety committees, Office Product Applied Science planning, and the hiring committee.

#### **Founder, AI Startup**

(Sept 2023 – Feb 2024)

- Prototyped a GPT-powered healthcare app for personalized patient education, with a planned nonprofit launch in 2025.

#### **Director of Machine Learning & Engineering, Adobe**

(July

2019 – May 2023)

- Oversaw a 40–60 person cross-functional ML organization delivering AI innovations for Adobe Sign, Acrobat, Stock, Creative Cloud, and the Experience Platform; specialized in generative AI, computer vision, NLP, recommendation systems, and audio/video optimization.
- Drove major improvements in form-field detection (Adobe Sign), PDF viewing (Acrobat iOS liquid mode), and multilingual layouts (Adobe Express) via an enhanced document-structure model; managed a team that developed compact models for mobile devices, resulting in a 3× increase in form-detection efficiency, support for 15+ languages, and reduced iOS failure rates.
- Developed privacy-preserving embeddings for customer-facing ML systems (in collaboration with legal teams on GDPR/CCPA) and led data-stitching frameworks to create 360° customer profiles.
- Introduced Q&A, summarization, and highlights for Acrobat using retrieval-augmented generation; deployed a privacy-centric AI pipeline on Azure to accelerate document intelligence feature development.
- Built an ML-based ranking framework for Adobe Stock and Creative Cloud’s recommendation systems; created a semantic text-to-image search using multi-modal CLIP embeddings and a k-sparse autoencoder to improve recall and search diversity.
- Launched an advanced audience discovery platform with segmentation, fast nearest-neighbor techniques, and scalable clustering; cut operational costs by 4× through pipeline simplification and parallelization-driven improvements; redesigned the UX based on marketer feedback, earning strong pilot customer praise.

#### **Director of Machine Learning & Engineering, Salesforce**

(July

2016 – July 2019)

- Directed a 40+ person ML organization across the US, EU, and Asia, delivering AI-driven features that enhanced user engagement in Community Cloud and improved enterprise onboarding in Service Cloud; oversaw model design, data pipelines, deployment strategies, and cross-functional partnerships.
- Launched recommendation systems, spam detection, Q&A features, chatbots, enterprise search, and ML-based feed ranking—achieving a 20% boost in engagement and broader AI adoption.
- Collaborated with ethics committees to ensure GDPR/CCPA compliance and led security reviews for community and service data flows.
- Developed BERT-powered chatbots and dialogue recommendation systems for retail, banking, and hospitality, significantly increasing accuracy and adoption.

#### **Founder & Managing Consultant, SmartInfer LLC**

(2015 – 2019)

- Advised Etsy on search analytics, machine-learned spell correction, and AI organization design across two locations.
- Boosted Neurotrack’s Alzheimer’s diagnostic accuracy by 20% through improved pupil-tracking algorithms.

#### **Director of Search Science, Walmart E-commerce**

(June 2014 – Oct 2015)

- Led a 16-month AI transformation with 80+ staff, creating an analytics team to address search inefficiencies in demand/supply; mapped key business problems to ML solutions including multi-layer ranking, query understanding, smart promotions, and specialized search for tires/pharmacy—achieving 23% revenue growth and 17% sales uplift.
- Streamlined recruitment and forged university partnerships, scaling R&D at the Bangalore center.

## Director, Data Science and Engineering, Elance/UpWork

(June 2013 – June 2014)

- Built a contractor ranking and recommender system from scratch, increasing hiring rates by 4%.
- Created a controlled experimentation platform for data-driven improvements, supporting Elance’s transition to UpWork.

## Early Career (2005 – 2013): Roles at eBay, Amazon A9, Microsoft, and MyFamily/Ancestry

- Contributed to ML-based ranking (Cassini, +6% revenue), image-search pipelines, indexing and crawling in C++, and OCR error correction models.

## Education

- **Ph.D. in Computer Science**, University of California, Davis (2018) – AI, Distributed Systems
- **Executive Education**, University of California, Berkeley (2018) – Negotiation and High Performance Leadership
- **M.S. in Computer Science**, Ohio State University (2005) – Distributed Data Mining
- **M.S. in Computer Science**, University of South Florida (2002) – Computer Vision and Graphics
- **M.Tech in Mechanical Engineering**, IIT Kanpur (1999) – Robot Vision & Planning
- **B.E. in Mechanical Engineering**, West Bengal (1996)

## Selected Patents and Publications

- **Patents:**
  - Service Agent Personal Recommender System (US 1020369)
  - Image-based Popularity Prediction (US 20120303615)
  - Query Classification for Improved Search Relevance (US 20120221557)
- **Publications:**
  - Doctoral Thesis: *Machine-Learned Ranking Algorithms for E-commerce Search and Recommendation Applications*.
  - IEEE Big Data (2015): *Controlled Experiments for Decision-making in E-commerce Search*
  - SIGIR ECOM (2018): *Towards Optimization of E-Commerce Search and Discovery*.
  - Master’s Thesis (2005): *Efficient Clustering Algorithms for Out of Core, Distributed and Streaming Data*

## Selected Awards and Recognitions

- Conference Reviewer (SIGIR, KDD, EMNLP), Speaker/Panelist (AI, ML, E-commerce), and UC Davis Graduate Fellowship recipient.