

Shankar M

Enterprise Architect

Los Angeles, CA, United States | [LinkedIn](#)

Enterprise software architect driving digital transformation at global luxury retail, with 10+ years of experience building scalable systems and leading large engineering organizations at Amazon and beyond.

EXPERIENCE

Enterprise Architect, Saks Global Jan 2022 — Present
Saks Global *Remote*

Leading digital transformation across merchandising, marketing, commerce, payments, order management, and infrastructure for a global luxury retailer. Architected next-generation Product Detail Pages and led payments modernization with a new PLCC provider. Migrated order flows to scalable service-oriented architectures while guiding architectural decisions for 400+ engineers.

Independent Consultant Jan 2017 — Jan 2018
Consulted for multiple firms, including one of the Big Three Management Consultancies

Product and Tech Lead, Indirect Supply Chain Jul 2015 — Jun 2016
Amazon *Greater Los Angeles Area*
Owned Tier-1 services for Amazon Go, refactoring production systems to reduce monthly operational issues from 40+ to 2. Built KPI aggregation and reporting services to track system health and performance.

Software Engineer Oct 2013 — Jun 2015
Qualcomm *Greater San Diego Area*
Implemented middleware features for NFC software stacks on commercial Android and prototype Windows devices, enabling near-field communication capabilities across multiple platforms.

Software Engineer Jun 2012 — Sep 2013
Pendrell Technologies *Greater Los Angeles Area*
Developed Python scripts to extract and analyze structured and unstructured patent data, generating business insights from large datasets.

Research Intern May 2011 — Jul 2011
AT&T Labs, Inc. *New Jersey*
Given a pair of stereo-images, obtained an implicit 3D representation of the scene, and used this representation to synthesize the image visible from a virtual viewpoint

Research Assistant Jan 2009 — Jan 2010
Universidad Politécnica de Madrid *Madrid Area, Spain*
GPU-acceleration for algorithms in graphics: Implemented a recursive subdivision algorithm on CUDA, a general-purpose GPU architecture.

EDUCATION

UCLA Sep 2013 — Jun 2015
MS in Computer Science

Indian Institute of Technology, Madras Sep 2008 — Jun 2012
B-Tech in Electrical Engineering

PROJECTS

Cataract Surgery Software
Wrote software for the Jules Stein Center (UCLA) to prevent rupture of lens sac during Cataract Surgery
The software tracks the operating tool-tip across frames and detects the formation of folds near the tool tip, which indicates the possibility of rupture

Principal Component Analysis for Human Faces
Machine Learning

Human Pose Estimation from images
Created a framework for pose estimation using a combination of face and skin-color detection
Used a Mixture of Gaussians model for skin, color histograms to ensure invariance to illumination and belief propagation for the final pose estimation

Tracking deformable objects using Particle Filters
Computer Vision (Team)

Implementation of a simple ray-tracer

Computer Graphics

Improve the visualization of workflows in LONI pipeline software

Software engineering (Team)

Introduction to Optimization, Bi-linear Image Interpolation

CAD Lab

Modeling a primitive two-resource market using Animats

Animats Modeling

Modeling of supervised and unsupervised learning

Biological Vision

CERTIFICATIONS

Objective and subjective evaluation of static 3D mesh compression *Signal Processing: Image Communication*, Volume 28, Issue 2,

Feb 2013

Gold medal in Computer Science, University of New South Wales

Jan 2002

Indian National Talent Search Exam (NTSE) Scholar, Jan 2003

AWS Certified Solutions Architect - Associate, Amazon Web Services (AWS)

SKILLS

Enterprise Architecture · Digital Transformation · Domain-Driven Design (DDD) · C · C++ · Java · Matlab · Algorithms · Python · SQL · HTML · Data Structures · Machine Learning · Linux · Programming · MySQL · Perl · Unix · Software Engineering · OpenGL · Android · Kotlin · JavaScript · React · AWS Lambda · AWS Kinesis · AWS DynamoDB · AWS Redshift · AWS SNS/SQS · AWS CDK · Microservices · Event-driven systems · Cloud Architecture · Full-stack development · System Design · Architecture · Leadership