

Amruta Purandare

CREATIVE TECHNOLOGY - MEDIA & ENTERTAINMENT

EDUCATION

UNIVERSITY OF MINNESOTA

Masters in Computer Science
Aug 2002 - Aug 2004

PUNE UNIVERSITY

Bachelors in Computer Engineering
July 1998 - July 2002

CAREER JOURNEY

- Started career in 2001 by applying AI + ML to solve Text Mining & Natural Language Understanding (NLU) problems, gradually moving into Speech + Audio + Dialog Processing, and more recently into Multimedia domain that involves Image Recognition, Video Understanding & Mixed Reality
- Diverse Experience across R&D (7 yrs), Corporate IT (5 yrs) and Creative Ventures (5 yrs)

CURRENT ROLE

Joined Cognizant in Dec 2021 as part of Media, Communications & Technology group

Worked as Solutions Architect for Warner Music Group on following projects:

- **Lyrics Transcription:** Automated Transcription of Songs
- **Artwork Validation:** Review & Correct Meta-Data by Extracting Text from Album Cover Images

Web Application setup and deployed in AWS Elastic Beanstalk using Python Flask, AWS Transcribe, SageMaker, Cloud Search and Augmented AI (A2I)

KEY PROJECTS

IMAGE & VIDEO UNDERSTANDING

Identify popular TV, Movie, Cartoon & Comic Book Characters using AutoML Vision

Detect Animal & Bird Species in Wild-Life Documentary Films using Object Detection

Recognize Activities (Swimming, Skating, Boxing, Cycling, Surfing etc) in Sports & Adventure Videos

Classify Food Images (cake, burger, pizza, pasta, juice, noodles etc) using Teachable Machines

Motion Capture in Dance & Action videos

Extract Person from Background & Replace Background using Video Segmentation

Capture Facial Expressions of Actors and Comedians in Dramatic & Comic Scenes

MUSIC & AUDIO

Audio Classifier to detect:

- **Ambiance Sounds:** traffic noise, car honking, dog barking, crying baby, drilling noise
- **Bird Sounds:** identify birds (owl, hawk, duck, pigeon, sparrow, crow, parrot) from sounds
- **Musical Notes:** keys played on piano

FASHION & ADVERTISING

Design & customize clothes by selecting Colors, Textures, Patterns, and try them in Virtual Trial-Rooms

Show Product Ads for clothes similar to what actors and models wear in videos

ACADEMIC RESEARCH

AREAS:

Natural Language Processing
Text Analytics
Data Mining
Spoken Language Technology
Dialog Understanding

FEATURED PUBLICATION:

Humor Analysis in FRIENDS
EMNLP 2006, Sydney

UNIVERSITY OF MINNESOTA

Research Assistant (2002 - 2004)

UNIVERSITY OF PITTSBURGH

Research Assistant (2004 - 2008)

UNIVERSITY OF SOUTHERN CALIFORNIA

Visiting Research Assistant (Summer 2007)

SINGAPORE MANAGEMENT UNIVERSITY

Research Staff Engineer (2009-2010)

INDUSTRY EXPERIENCE

Held leadership roles in large corporates & MNCs

Involved in mentoring junior team members

Participated in board meetings, prepared annual go-to-market strategy by identifying key focus areas and potential use-cases per industry sector

Involved in client meetings along with sales and business development teams, to present demos and working prototypes, prepared proposals by outlining the scope of work with key deliverables, milestones, budget & timelines

PERSISTENT

Project Lead in Analytics (2015-2016)

MAKE MY TRIP

Principal Data Scientist (2016-2017)

HAPPIEST MINDS

Associate Director in Analytics (2017-2018)

AMERICAN EXPRESS

Director of Engineering (2018-2019)

INTERNSHIPS

SONY, JAPAN (2008)

Information Extraction from Wikipedia to build Music Artists Database

AMAZON, SEATTLE (2005)

Product Taxonomy for Item Catalogs

PROFILE LINKS

LINKEDIN:

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

PERSONAL WEBSITE:

<https://pamruta.com>

GITHUB:

<https://github.com/pamruta>
