DEBAYAN MUKHERJEE

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PROFESSIONAL SUMMARY

Creative Technologist bridging artistic vision with cutting-edge technology, specializing in interactive media experiences, generative design systems, and immersive digital installations. Currently pursuing MS in Media Arts and Sciences at Arizona State University, with **10+ years of creative leadership** managing cross-disciplinary teams of creatives, photographers, design technologists and digital artists across global regions. Expert in **human-centered design workflows**, **real-time interactive systems**, and **creative AI integration** for large-scale content production and experiential media.

Creative Focus Areas: Interactive Media Design • Generative Art Systems • Real-time Visual Experiences • Creative AI Workflows • Immersive Technology • Human-Computer Interaction

WORK HISTORY

Teaching Assistant | ASU School of Game, Arts, Media and Engineering (Tempe) - AZ, USA   *08/2025 – Current*
- Support Dr. Lahey in teaching AME 210 Media Editing, focusing on Adobe Creative Suite and fundamentals of design principles
- **Student guidance**: Lead group discussions, conduct office hours for problem-solving, and provide one-on-one creative guidance
- **Academic assessment**: Grade student projects and provide constructive feedback on creative work and technical execution.

Social Media Assistant | ASU (Tempe) - AZ, USA   *08/2024 – Current*
- Ideate and produce multimedia content across all major social platforms for ASU's International Students and Scholars Center
- **Technical Innovation:** Lead experimental content formats and emerging technology integration for enhanced engagement
- **Trend Research:** Maintain cutting-edge content trend repository and engagement optimization strategies
- **Cross-Platform Design:** Create cohesive brand experiences across diverse digital touchpoints and audience segments.

Creative Manager | Amazon.com (Dubai) - Dubai, UAE   *06/2022 – 07/2024*
- Managed 20+ cross-domain creatives (videographers, photographers, stylists, art directors) across MEA-TR region impacting 5 Amazon marketplaces
- **Innovation Implementation:** Led visual format innovation including video-in-search and bilingual content design workflows
- **Process Innovation:** Achieved 10% YOY efficiency improvements through creative automation and technology integration
- **Creative Technology Strategy:** Established technical procurement processes and increased studio capacity by 50% through strategic CAPEX investments
- **Cost Optimization:** Led global video production efficiency initiatives achieving 30% improvement across all international studios
- **Campaign Creative Direction:** End-to-end creative campaign ideation and execution for brand and marketing initiatives.

Photography Manager | Amazon.com (India) - Haryana, India   *03/2020 - 06/2022*
- Managed 8 full-time creative professionals and 20+ freelancers in photography and digital asset production
- **Innovation Launch:** Led influencer-based video production and live streaming program launches for Amazon.in's content strategy
- **User Experience Research:** Conducted qualitative user studies and prototype testing using UserZoom Platform for informed content design decisions
- **Creative Technology Integration:** Launched short-form video strategies for multiple product categories and developed remote production capabilities
- **Workflow Optimization:** Established external creative production workflows enabling 25% capacity increase through strategic agency partnerships.

Photography Lead | Amazon.com (India) - Haryana, India   *07/2019 - 02/2020*
- Led Kaizen productivity improvement project using DMAIC principles, achieving 25% efficiency improvement for video content production
- Led creative technology setup for Singapore studio launch including equipment, process design, and team training
- Directed Apparel Image experience enhancement project for Amazon.ae including studio design and workflow development

Photographer | Amazon.com (India) - Haryana, India   *10/2015 - 06/2019*
- Led apparel visual experience enhancement projects and 360-degree video productivity optimization (40% improvement)
- **Innovation Solutions:** Designed lighting solutions for space-constrained studios, optimizing creative output within technical limitations
- **Studio Development:** Supported launch of Fashion & Apparel studio (DEL19) and Non-apparel Product studio (DEL3)

Photographer Assistant | Amazon.com (India) - Haryana, India   *08/2014 - 09/2015*
- Created launch content for new brands on Amazon platform
- **Technology Integration:** Gained expertise in automated imaging solutions and device-based creative workflows
- **Product Development:** Contributed to Photobox (Amazon proprietary tool) prototype development and final product refinement

Photographer | Aabis Design - New Delhi, India   *11/2013 - 07/2014*
- Catalogue Design: Created visual content for product ranges and brand identity systems
- Creative Production: Managed procurement and creative direction for composite imaging and brand materials

SKILLS

Creative Technology Stack
- Creative Coding: TouchDesigner, Max MSP, Unity, Processing, ComfyUI
- Design Tools: Adobe Creative Suite (Photoshop, After Effects, Premiere Pro, Illustrator), Capture One
- 3D & Interactive: WebGL, Three.js, Blender, P5.js, Cinder
- Programming: Python, JavaScript, Swift, HTML/CSS, C# (for creative applications)

Creative Production & Workflow
- User Research Tools: UserZoom, usability testing, A/B testing
- AI Creative Tools: Wekinator, Teachable Machine, Stable Diffusion
- ML Workflows: Multi-modal model integration, creative AI pipelines, style transfer
- Live Production: OBS Studio, live streaming, real-time video processing
- Asset Management: Creative automation, version control, production pipelines

Creative Leadership & Strategy
- Design Thinking: Human-centered design, prototype testing, iterative development
- Creative Operations: Large-scale content production, workflow optimization, quality management
- Cross-disciplinary Collaboration: Art direction, technical implementation, stakeholder communication
- Innovation Management: Emerging technology integration, creative experimentation, trend analysis

EDUCATION
- Arizona State University – Tempe, Arizona, USA   Currently pursuing (2024 – Expected 2026)
  MS Media Arts and Science (Concentration in Multi-modal generative art)
- National Institute of Fashion Technology (NIFT) - Shillong, India   *2009 – 2013*
  Bachelor of Design: Fashion Design

CORE COMPETENCIES
Creative Vision & Strategy
- Concept Development
- Design Systems
- User Experience
- Innovation Leadership
- Creative Coding
- Real-time Systems
- AI-Assisted Creativity
- Cross-platform Design
- Creative Operations
- Team Leadership
- Technology Adoption
- Quality Assurance

CREATIVE TECHNOLOGY PROJECTS

ALT-DJ: AI-Powered Interactive Music Experience | GitHub

Comprehensive system analyzing DJ performance gestures and applying neural style transfer to recreate famous DJ mixing styles in real-time.

Technical: YOLOv8 computer vision, PyTorch style transfer networks, Python audio processing with librosa, real-time desktop application

Prisma: Real-Time Temporal Video Installation | GitHub

Interactive webcam installation transforming live video feeds across three temporal perspectives: past, present, and future.

Technical: JavaScript WebGL pipeline, real-time video processing, efficient buffer management for seamless interaction

GROO-V-IT: Immersive 3D Music Visualization | GitHub

iOS app combining audio playback with real-time 3D character animations synchronized to music features.

Technical: Swift SceneKit, real-time audio analysis, procedural animation systems responding to beat/tempo/frequency

Echo-Halt: Social Platform for Unique Content | GitHub

Social media platform concept enabling only unique, non-duplicate content posting through AI-powered content verification.

Technical: Python Flask backend, machine learning similarity detection, content uniqueness algorithms

Imagebot: AI-Powered Creative Assistant | GitHub

Intelligent image editing bot combining traditional processing with AI-based sketch-to-image conversion for rapid creative ideation.

Technical: Python image processing, img2img-turbo model integration, automated creative workflow pipelines

Warrior Duel: Interactive Game Experience | GitHub

Side-scrolling fighting game with three warrior characters battling across progressive difficulty levels.

Technical: Swift SpriteKit, character animation systems, gameplay mechanics and difficulty balancing

Ingredient Care App: Health-Focused Design | GitHub

iOS app enabling users to scan food ingredient lists against 2K+ categorized safety database with intuitive health visualization.

Technical: Swift computer vision, ingredient scanning algorithms, health data visualization and accessibility design

Ongoing Projects

Media Installation Project | In Development

Large-scale interactive media installation exploring human-technology relationships through responsive environmental design integrating audio to human abstract reflections.

Technical: Real-time systems integrated to Unreal Engine/Touch Designer, generative visual programming, audio ML development.

Creative Coding with LLMs | In Development

Experimental framework integrating Large Language Models to improve creative visual coding environments for AI-assisted generative art workflows.

Technical: Python LLM APIs, creative coding frameworks, natural language to visual programming, procedural generation.

Unity FPS Game | In Development

First-person shooter game featuring advanced AI enemy behavior systems and Player controls with media pipe and OpenCV.

Technical: Unity C#, AI behavior trees, procedural level generation, real-time rendering optimization.