Gautham Koorma

Principal Consultant

510-936-9548
gautham@quandarypeak.com

Quandary Peak Research
22320 Foothill Blvd, Suite 460
Hayward, CA 94541

quandarypeak.com/gautham

Drawing on extensive experience across AI safety, digital forensics, and software investigations, I serve as a consulting and testifying expert for technology disputes and strategic matters. At Quandary Peak Research, I apply this multidisciplinary foundation to help clients navigate issues at the intersection of software IP, cybersecurity, and emerging AI technologies. My practice includes evaluating machine learning systems, analyzing digital records, and conducting structured examinations of complex software environments.

I have supported IP litigation for more than ten years through source code analysis, system behavior reconstruction, and technical due diligence. Complementing this investigative work, I have hands-on engineering experience designing and deploying machine learning models for synthetic media detection in operational settings. Beyond litigation, I contribute to technical audits for enterprise systems. I also engage with the research community as a reviewer for forensic and AI journals and speak on topics related to AI governance, deepfake detection, and the legal implications of generative models.

Education

Master of Information Management & Systems

University of California, Berkeley – School of Information | Berkeley, CA | 2021–2023

- **Coursework:** Machine Learning, Deep Learning, Natural Language Processing, Computer Vision, Audio Signal Processing, Data Engineering, Experiments & Causal Inference, Quantitative Research, Information Law & Policy, Lean Product Development.
- **Teaching Assistantships:** Natural Language Processing, Applied Econometrics, Applied Machine Learning.
- **Research:** Deepfake detection and media forensics under Professor Hany Farid.

B.Tech in Electronics & Communication Engineering

National Institute of Technology, Calicut | Calicut, India | 2007–2011

- **Focus:** Telecom & Wireless Networks, Digital Signal Processing, Microprocessor and Microcontrollers, Computer Architecture

Professional Associations

- **Senior Member**, Institute of Electrical And Electronics Engineers and IEEE Computer Society
- **Member**, Association for Computing Machinery (ACM) and ACM Special Interest Group on Artificial Intelligence

Areas of Expertise

Data Science & Engineering
Python, SQL, R, PyData Stack (pandas, numpy, scipy), Data Visualization (matplotlib, seaborn, plotly), A/B Testing, Experiments & Causal Inference, Superset, PySpark, Airflow, DAGs, Snowflake

Machine Learning & AI
Scikit-learn, PyTorch Ecosystem (torch, torchvision, torchaudio, timm, lightning), Huggingface, TensorFlow, Keras, XGBoost, MLflow, DVC, OpenCV, dlib, MediaPipe, librosa, opensmile, pyannote, ffmpeg, openclip

MLOps & Deployment
Docker, Ray, Terraform, AWS SageMaker, ONNX, GitHub Actions, Weights & Biases, AWS Lambda & ECS

Forensics & Red Teaming
Adversarial Testing, Failure Mode Analysis, Model Interpretability, Bias/Fairness Audits, Prompt Injection, Synthetic Media Detection (images, audio, video), Reverse Engineering, Digital Forensics

Research & Product Focus
Computer Vision, Audio/Signal Processing, NLP, Generative AI, Cybersecurity, Explainability, Lean & Agile Methods, Product Roadmaps, Research Translation

Hardware & Systems
Microcontrollers, Embedded Systems, System Software, Memory Management, Wireless Standards (WiFi, LTE, GSM), FPGA Logic Design, RTL Simulation

Programming Languages
Python, SQL, R, C, C++, Java, Javascript, Verilog

Professional Experience

Quandary Peak Research

Principal Consultant | Hayward, CA | June 2025–Present

- Lead technical investigations in software-related litigation, including source code analysis, reverse engineering, and digital forensics. Advise clients on AI safety and strategy, helping organizations assess risk and implement responsible AI systems.

GetReal Labs Inc.

Senior Machine Learning Engineer | Berkeley, CA | June 2023–Mar 2025

- Domain: Cybersecurity & Digital Forensics.
- Founding member of technical staff focused on developing machine learning models for synthetic media detection across image, audio, and video modalities.
- Built and deployed containerized ML pipelines for training, validation, and inference on AWS infrastructure.
- Designed threat taxonomy and led adversarial and robustness evaluations to strengthen model performance.
- Supported incident response workflows during the 2024 election cycle, enabling media triage and analysis.

Moveworks Inc.

Data Science Intern | Mountain View, CA | May 2022–Aug 2022

- Domain: Product Analytics.
- Developed dashboards and success metrics to evaluate adoption and performance of conversational AI features.
- Provided data insights to inform product strategy and improve user engagement across enterprise clients.

UnitedLex Corporation via iRunway

Director / Consultant / Associate | Austin, TX & Bangalore, India | Oct 2012–July 2021

- Domain: Litigation Support & IP Strategy.
- Led technical investigations in IP litigations across wireless, software, semiconductors, and enterprise systems.
- Delivered source code analysis, product testing, and technical documentation for use in expert reports and legal proceedings.
- Conducted reverse engineering and dynamic/static analysis of software and firmware to identify infringement and trade secret usage.
- Built analytics pipelines to evaluate patent strength, product alignment, and licensing potential.
- Performed technical due diligence on IP portfolios in M&A and licensing contexts, aligning IP with product strategy and market trends.
- Engaged with law firms and in-house counsel to translate technical findings into actionable litigation and licensing strategy.
- Managed global teams across delivery and operations; led hiring, training, and process optimization initiatives.

Evalueserve SEZ Pvt. Ltd.

Research Associate | Gurgaon, India | Feb 2012–Oct 2012

- Domain: Patent Research.
- Trained in patent law, prior art methodologies, and technical writing for IP prosecution and analysis.
- Conducted prior art searches and created technology landscape reports to support legal and business decisions.

Litigation Consulting

✦ Provided deposition testimony, or trial testimony
✤ Provided an expert report, or declaration

- **Deposition Solutions, LLC v. Agile Brains Consulting, Inc.** | May 2026–Present
  Jurisdiction: 129th Judicial District Court, Harris County, Texas
  Case Number: 2024-45601
  Counsel: Orrick, Herrington & Sutcliffe LLP
  Nature of Suit: Breach of Contract
- **ST6, LLC v. MacStadium, Inc.** | May 2026–Aug 2026
  Jurisdiction: Superior Court of Fulton County, Georgia
  Case Number: 25-cv-003282
  Counsel: Alex Bartko Law, LLC
  Nature of Suit: Trade Secret Misappropriation

- ✣ **Capconvert, LLC v. Brown, et al.** | May 2026–Present
  Jurisdiction: U.S. District Court for the Northern District of California
  Case Number: 3:26-cv-02149
  Counsel: Grellas Shah LLP
  Nature of Suit: Trade Secret Misappropriation
- **Hyperlync Technologies Inc v. T-Mobile USA, Inc., et al.** | Feb 2026–July 2026
  Jurisdiction: Superior Court of the State of Washington, King County
  Case Number: 24-2-06642-0
  Counsel: Corr Cronin LLP
  Nature of Suit: Breach of Contract
- **Truly Social Games, LLC, et al. v. East Side Games Group Ltd., et al.** | Feb 2026–May 2026
  Jurisdiction: Supreme Court of British Columbia, Vancouver Registry
  Case Number: S-231406
  Counsel: Dentons Canada LLP
  Nature of Suit: Copyright, Trade Secret
- **Perceptive Automata LLC v. Tesla, Inc.** | Jan 2026–Present
  Jurisdiction: U.S. District Court for the Eastern District of Texas
  Case Number: 2:25-cv-00742
  Counsel: Nelson Bumgardner Conroy PC
  Nature of Suit: Patent
- **IPA Technologies Inc. v. Google LLC** | Jan 2026–Present
  Jurisdiction: U.S. District Court for the District of Delaware
  Case Number: 1:18-cv-00318
  Counsel: Skiermont Derby LLP
  Nature of Suit: Patent
- **Margolis, et al., Individually and on Behalf of All Others Similarly Situated v. Apple, Inc.** | Jan 2026–Present
  Jurisdiction: U.S. District Court for the Northern District of California
  Case Number: 5:23-cv-03882
  Counsel: Pomerantz LLP
  Nature of Suit: Class Action
- **VB Assets, LLC v. Soundhound AI, Inc.** | Nov 2025–Present
  Jurisdiction: U.S. District Court for the District of Delaware
  Case Number: 1:24-cv-01279-MN
  Counsel: Frarnan LLP, Jenner & Block LLP, Greenbaum Law LLC
  Nature of Suit: Patent
- **Chetu, Inc. v. Song Me, Inc.** | Nov 2025–Aug 2026
  Jurisdiction: FL Circuit Court, Broward County
  Case Number: CACE-22-001370
  Counsel: Perlman, Bajandas, Yevoli & Albright, P.L.
  Nature of Suit: Breach of Contract
- ✦ ✣ **Mobius Poker LLC v. Jonathan Bashary** | Oct 2025–Dec 2025
  Forum: Judicial Arbitration and Mediation Services (JAMS)
  Case Number: JAMS Ref No. 5220009811
  Counsel: Quinn Emanuel Urquhart & Sullivan, LLP
  Nature of Suit: Breach of Contract, Trade Secret

- **Infernal Technology, LLC, and Terminal Reality, Inc v. Sony Interactive Entertainment, LLC** | Jan 2020–July 2021
  Jurisdiction: U.S. District Court for the Eastern District of Texas
  Case Number: 2:19-cv-00248-JRG
  Counsel: Buether Joe & Counselors LLC
  Nature of Suit: Patent
  Technology: Computer Graphics
- **Infernal Technology, LLC, and Terminal Reality, Inc v. Activision Blizzard, Inc** | July 2019–July 2021
  Jurisdiction: U.S. District Court for the Northern District of Texas
  Case Number: 3:18-cv-01397-D
  Counsel: Buether Joe & Counselors LLC
  Nature of Suit: Patent
  Technology: Computer Graphics
- **Silvaco, Inc. v. Gliding Eagle, Inc.** | Sept 2019–Oct 2019
  Jurisdiction: U.S. District Court for the Northern District of California
  Case Number: 5:18-cv-07135-SVK
  Counsel: Gaw | Poe LLP
  Nature of Suit: Breach of Contract
  Technology: Blockchain, E-Commerce
- **Applied Invention v. DuPont Pioneer** | Oct 2018–Feb 2019
  Forum: American Arbitration Association (AAA)
  Case Number: AAA 01-18-0000-8614
  Counsel: Irell & Manella LLP
  Nature of Suit: Trade Secret
  Technology: Precision Agriculture
- **BMC Software, Inc. v. Cherwell Software, LLC** | Aug 2017–July 2018
  Jurisdiction: U.S. District Court for the District of Colorado
  Case Number: 1:17-cv-03127-MSK-STV
  Counsel: McKool Smith
  Nature of Suit: Patent
  Technology: IT Infrastructure Management
- **Sony Corporation v. Fujifilm Corporation** | Oct 2017–June 2018
  Jurisdiction: U.S. International Trade Commission (ITC)
  Investigation Number: 337-TA-1058
  Counsel: Baker Botts LLP
  Nature of Suit: Section 337 Investigation
  Technology: Firmware, Magnetic Tape Drives
- **Fitbit, Inc. v. Aliphcom (d/b/a Jawbone)** | Mar 2016–Sept 2016
  Jurisdiction: U.S. District Court for the Northern District of California
  Case Number: 5:2016-cv-00118; 5:2015-cv-04073
  Nature of Suit: Patent and Trade Secret
  Technology: Wearables, Fitness Tracking Algorithms

- **Ericsson Inc. v. Apple, Inc.** | July 2015–Dec 2015
  Jurisdiction: U.S. International Trade Commission (ITC)
  Investigation Number: 337-TA-953
  Counsel: McKool Smith
  Nature of Suit: Patent
  Technology: Mobile Communications, Bootloaders, Security
- **Klaustech LLC v. Google, LLC / AdMob Inc.** | July 2015–Dec 2015
  Jurisdiction: U.S. District Court for the Northern District of California
  Case Number: 4:10-cv-05899-JSW
  Counsel: Mischon de Reya
  Nature of Suit: Patent
  Technology: Mobile Advertising
- **Ericsson Inc. v. Samsung Electronics Co., Ltd.** | 2014–2015
  Jurisdiction: U.S. District Court for the Eastern District of Texas
  Counsel: McKool Smith
  Nature of Suit: Patent
  Technology: Wireless Communications (GSM, WCDMA, LTE, Wi-Fi)
- **BMC Software, Inc. v. ServiceNow, Inc.** | 2016–2017
  Jurisdiction: U.S. District Court for the Eastern District of Texas
  Case Number: 2:14-cv-00903-JRG
  Counsel: McKool Smith
  Nature of Suit: Patent
  Technology: IT Infrastructure Management
- **Intellectual Ventures LLC v. Capital One Financial Corporation** | 2014–2017
  Jurisdiction: U.S. District Court for the Eastern District of Virginia
  Counsel: Feinberg Day
  Nature of Suit: Patent
  Technology: PCI-DSS, Payment Processing
- **No Magic, Inc. v. Thales Security, Inc.** | 2013–2014
  Jurisdiction: U.S. District Court for the Eastern District of Texas
  Counsel: DiNovo Price Ellwanger & Hardy LLP
  Nature of Suit: Patent
  Technology: Cybersecurity, Cryptography

Intellectual Property Consulting

- **Automotive Manufacturer** | 2020–2021
  Expert Role: Evaluated engine control, vehicle safety, and connectivity systems.
- **Fortune 500 Semiconductor Company** | 2019–2021
  Expert Role: Assessed system software, memory architecture, and firmware IP.
- **Consumer Electronics Firm** | 2019
  Expert Role: Developed and executed structured test plans across multiple mobile phone models to gather empirical evidence supporting patent claims related to battery performance and degradation.
- **Global IP Holding Company** | 2014–2017
  Expert Role: Generated licensing evidence and evaluated software patent portfolios.

- **Fortune 50 System Software Provider** | 2014–2017
  Expert Role: Created invalidity and EoU charts for system/kernel software.
- **Networking Equipment Vendor** | 2013–2015
  Expert Role: Retained as a consultant to prepare licensing charts for a portfolio of networking patents.
- **Major Aftermarket Services Vendor** | 2013–2014
  Expert Role: Identified patentable technologies, supported patent drafting.
- **Telecom Monetization Entity** | 2012–2014
  Expert Role: Analyzed patents for acquisitions, Prepared licensing charts for telecom infrastructure patents.
- **Telecom Landscape Studies** | 2012
  Expert Role: Delivered market and patent whitespace analysis for wireless standards.

Technical Due Diligence & Audits

- **Schneider Electric Industries SAS** | Technical Review | May 2026
  Technology: Solar Energy Management, IoT Monitoring, Edge Devices
- **Wa'ed Ventures** | Startup M&A | Apr 2026
  Technology: AI/ILM, AIware, AI Hardware Infrastructure, GPU
- **Valsoft Corporation** | SaaS | Mar 2026
  Technology: AI-enabled Cloud and Infrastructure Management
- **Valsoft Corporation** | SaaS | Feb 2026
  Technology: Datacenter Management Solution
- **Schneider Electric Industries SAS** | Technical Review | July 2025
  Technology: AI/ML Predictive Analysis, Smart Home IoT, SaaS

Publications & Media

- G. Koorma, V. Sharma, G. Edwards, M. Eslamimehr | 2026
  “Directed Neuro-Symbolic Stochastic Execution for Verification of Distributed Parallel AI Programs,”
  in *Proceedings of the 5th Conference of Information Systems for Business Management* (ISBM 2026)
- G. Koorma, I. Pflaum, R. A. Pachamanov, V. Sharma, G. Edwards, M. Eslamimehr | 2026
  "State-Aware Hybrid Concrete-Symbolic Analysis for Automated Vulnerability Discovery in IoT Communication Protocol," in *Proceedings of the 2026 13th International Conference on Future Internet of Things and Cloud* (FiCloud). IEEE, 2026.
- **How Spam Filters Shaped the Field of Adversarial ML** | Apr 2026
  Top Story: HackerNoon
- **Quoted Commentary on Generative AI and Deepfakes** | 2024
  Featured in: Biometric Update; India Today; MediaNama
- S. Barrington, R. Barua, G. Koorma, H. Farid | 2023
  “Single and Multi-Speaker Cloned Voice Detection: From Perceptual to Learned Features,” in *IEEE International Workshop on Information Forensics and Security* (WIFS).
  https://ieeexplore.ieee.org/abstract/document/10374911

Selected Talks & Panels

- **Forensics for Agentic AI: Detecting and Tracing Poisoning in Agentic Systems** | June 2026
  Speaker — IEEE Cloud Summit 2026, Washington DC
  https://www.ieeecloudsummit.org/2026-speakers
- **Digital Deception: Deepfakes, AI Impersonation, and the Surveillance Arms Race** | May 2026
  Panelist & Presenter — 3rd Annual Information & Privacy Law Program, University of Illinois Chicago School of Law
- **Diagnosing Failures and Risks in Generative AI for Assurance** | Dec 2025
  Speaker — IEEE New Era AI World Leaders Summit, Ethical and Responsible AI Track
  https://attend.ieee.org/neweraai25/ethical-responsible-ai-track/#koorma
- **Copyright Chaos: The Litigation Labyrinth of AI Training** | Nov 2025
  Panelist and Presenter — 69th Intellectual Property, Information & Privacy Law Conference, University of Illinois Chicago School of Law
- **Case Study: AI & Elections** | 2024
  Panelist — Online News Association
  https://journalists.org/event/case-study-what-we-can-learn-about-ai-and-elections-from-the-worlds-biggest-election/
- **Detecting Deepfakes: From Classical Physics to Deep Learning** | 2024
  Speaker — Anthill Inside (AI Governance) | https://hasgeek.com/anthillinside/detecting-deepfakes
- **Deepfakes and Democracy** | 2024
  Panelist — MediaNama (Tech & Policy)
  https://www.medianama.com/2024/01/223-video-medianama-deep-fakes-democracy-2/

Grants & Awards

- **Detecting AI Voice Cloning** | 2024
  SXSW Innovation Award Finalist – Student Innovation Category
  https://www.sxsw.com/news/2024/sxsw-2024-innovation-awards-finalists-announced/
- **The Deepfake Fingerprint** | 2023
  United Nations Development Programme | Prizewinner, Nobel Prize Summit on Countering Misinformation
  https://www.undp.org/policy-centre/governance/events/undps-participation-nobel-prize-summit-2023
- **Digital Fingerprinting to Protect Against Deepfakes** | 2023
  Research Grant, Berkeley Center for Long-Term Cybersecurity
  https://cltc.berkeley.edu/publication/digital-fingerprinting-to-protect-against-deepfakes/

Research Community Service

- **Reviewer | CVPR Workshop on Authenticity & Provenance In The Age of Generative AI** | 2026
- **Reviewer | IEEE Open Journal of the Computer Society** | 2025
- **Reviewer | Advances in Electrical and Electronic Engineering** | 2025
- **Reviewer | ICCV Workshop on AI for Privacy, Accountability, and Integrity** | 2025
- **Reviewer | Forensic Science International: Digital Investigation** | 2024

Teaching

- **Guest Lecturer | Safeguarding Information Systems** | Nov 2025
  CSCI 510 - Software Management and Economics | University of Southern California

Languages

- English, Malayalam, Hindi