Minh N. Do

Software Consultant

888-959-9639
minh@quandarypeak.com

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

quandarypeak.com/minh

I am an accomplished computer scientist, experienced software engineer, and entrepreneur with 20+ years of experience in the technology industry with a robust educational background. Throughout my career, which spans roles at Apple, Toyota Research Institution, Netflix, and other leading organizations, I have consistently showcased my proficiency in designing and implementing scalable platforms and contributing to developing innovative technologies. My skill set encompasses a variety of programming languages and knowledge in a wide range of open-source software.

My extensive experience in building and operating scalable, high-availability, distributed infrastructures, coupled with my familiarity with the latest ML/AI technologies, positions me as a valuable asset at the intersection of computer science and legal contexts. I bring experience and perspective deeply rooted in programming to the legal landscape.

Education

M.S. in Applied Math
Santa Clara University | May 2021

M.B.A.
University of Phoenix, San Jose | Aug 2006

B.A. in Computer Science
University of California, Berkeley | May 2000

Employment

Software Consultant
Quandary Peak Research | Hayward, CA | Nov 2023–Present

– Serve as a consultant and source-code analyst in litigations, including patent and copyright infringement, breach-of-contract matters. Skilled in source code review and reverse-engineering.

– Evaluate the software architecture of various products and assess overall characteristics, strengths, and weaknesses.

ICT 5 Software Engineer in Maps Organization
Apple | Cupertino, CA | May 2019–Oct 2023

– Built and maintained Map Tile Servers (K8s service, Java/Kotlin, Cassandra, Redis).

– Built and maintained Streaming POI Map Pipeline (Kotlin, Kafka, Cassandra).

– A part of a small team responsible for big data infrastructure that runs a geometry processing and map encoding engine for producing map tiles (Spark, AWS, Java/Kotlin/Scala/C++/Python).

- Built a miniature system with the entire Maps processing stack for editor tooling integration for quick map generation on newly edited datasets.
- Developed a data warehouse system to hold various map datasets for system integrations.
- Designed and built an inexpensive, hundred-of-petabyte scale datastore with Iceberg and Parquet for sub-regional map tile generation.

Technical Advisor
QuantaDex | Santa Clara, CA | Jan 2018–Feb 2020

- Advising on building a new BlockChain system to support QuantaDex's Decentralized Cryptocurrency Exchange

Staff Software Engineer
Toyota Research Institution | Palo Alto, CA | June 2018–Feb 2019

- Led the Data Pipeline team for data ingestions.
- Led the effort to build a Data Lake to support various ML/AI projects for autonomous driving systems.

Senior Distributed System Engineer and Architect
Netflix | Los Gatos, CA | Mar 2013–May 2018

- Worked on data ingestion systems to bring structured and unstructured data into the main data vault.
- Led the architectural design and development of a distributed caching system for multi-datacenter deployments (Dynomite) and its Java client driver (Dyno). Acquired a patent on this.
- A part of the Cassandra operation team to bring OSS patches into internal Cassandra deployments.
- A contributor to the Cassandra OSS project as well as speaking at CassandraSummit and Cassandra meet-up.
- Built scalable abstraction API service layer using gRPC to provide access to many data storages by delivering a unified, simple set of APIs.

Big Data Team Founding Engineer
TangoMe | Palo Alto, CA | Feb 2012–Mar 2013

- Designed and developed a big data log processing system using Hadoop, Spark, Hive, and AWS to process Tango logs (130M daily users) and integrate analytic information into other internal systems.

Senior Platform Engineer and Architect
PepperMob | Milpitas, CA | May 2011–Feb 2012

- Designed and implemented the distributed, scalable platform in AWS leveraging Tomcat, Nginx, Membase, RabbitMq, Mysql, Cassandra, Amazon Ec2/VPC/S3, Rails, and Oauth integration.
- Designed and implemented REST API for Mobile Apps.
- Researched Mahout/Hadoop to build a document classification system.
- Maintained and enhanced the Ruby-on-Rails User Portal.
- Integrated Dropbox, Box, and Salesforce APIs.

Senior Platform Engineer
Qualys | Redwood City, CA | June 2010–May 2011

- Developed a distributed messaging infrastructure as a core messaging bus for internal system integration.

- Designed and implemented a multithreaded, high-concurrency JMS consumer library in Java.
- Participated in design and hand-on implementation for Qualys' developer API and SDK.

Senior Platform Engineer
HighTail (formerly YouSendIt) | Campbell, CA | Jan 2009–June 2010

- Participated in the designing and implementation of YouSendIt's 2nd generation microservice platform.
- Involved in various SOA/API backend services.
- Built a client caching framework.

Senior Software Engineer
Ariba | Sunnyvale, CA | Sept 2006–July 2008

- Enhanced various middle/backend components in Ariba's Supply Chain Management System.
- Maintained payment component and price negotiation system.
- Involved in privacy-compliant enhancements and data reports.
- Contributed to cross-system data exchange, UI enhancements, and SQL performance tunings.

Founding Engineer
Aimset, Inc | Redwood City, CA | May 2005–June 2006

- Designed and implemented a multi-tier/multi-tenant system.
- Integrated Alfresco document management in the Aimset system.
- Designed/built Aimset's network layout in the data center.
- Managed a group of a few engineers/testers.

Software Engineer
Nextag | San Mateo, CA | Mar 2003–May 2005

- Designed and implemented a Business Intelligence system backend and analytic UI dashboard for Nextag's Mortgage product.
- Developed Nextag's Education Product.
- Developed many backend components for Nextag's Application Server: database connection pooling, web page caching, distributed file collector, and custom queue messaging system.

Founding Engineer
Coenso, Inc | San Jose, CA | Oct 2001–May 2003

- Designed/implemented a mobile tracking system for drivers and delivered products.
- Built a workflow item tracking system.
- Modified the open-source CourierIMAP to enhance security.
- Managed a group of 4 engineers/testers.

Software Engineer

Palm Associate | San Jose, CA | May 2000–Sept 2001

- – Ported Java Virtual Machine to Qualcomm Zrex OS.
- – Developed a voice-over-ip recognizer traffic application server using Nuance and telephony boards.
- – Built an analytic application on Microsoft's WebTV log files for data mining.

Litigation Consulting

- · <u>**Anduril Industries, Inc**</u> **v. Salient Motion Inc** | Apr 2024–Present
  Jurisdiction: US District Court, Central District of California
  Case Number: 8:23-cv-01650
  Counsel: McKool Smith, P.C.
  Nature of Suit: Trade Secret

- · **Electronic Devices Including Smartphones, Computers, Tablet Computers, and Components Thereof**
  Feb 2024–Present
  Jurisdiction: International Trade Commission (ITC)
  Case Number: 337-TA-1373
  Counsel: Alston & Bird LLP
  Nature of Suit: Patent

- · **Oriental Trading Company LLC v.** <u>**Denovo Ventures LLC**</u>
  <u>**Denovo Ventures LLC**</u> **v. Legacy Holding Group, LLC. D/B/A Tip Top Solutions** | Jan 2024–Present
  Jurisdiction: District Court of Douglas County, Nebraska
  Case Number: CI 2206047
  Counsel: Gordon Rees Scully Mansukhani, LLP
  Nature of Suit: Copyright, Breach of Contract

- · **Nantworks, LLC, and Nant Holdings IP, LLC v.** <u>**Niantic, Inc.**</u> | Nov 2023–Present
  Jurisdiction: US District Court Northern District of California
  Case Number 3:20-cv-06262
  Counsel: Sullivan Blackburn Pratt LLP
  Nature of Suit: Patent

Skills

Experience in building and operating scalable, high availability, distributed infrastructures: caching, database, and storage systems, big data processing systems, event-driven systems, streaming systems, micro-services, graph processing systems, etc.

Familiar with ML/AI infra and ML/AI models build and deployment using Ray, Keras, Pytorch, and Tensorflow.

Languages: mainly but not limited to Java, C, C++, Kotlin, Scala, Python, Golang, and Javascript.

Other technologies: Kubernetes, Cassandra, Spark, Hadoop, Yarn, Hive, AWS, MySQL/Postgres, Solr/ElasticSearch, Kafka, Flink, Iceberg, Spring, Linux, Memcached/Redis, Neo4j, etc.

Languages

- English (professional)
- Vietnamese (college level)
- Spanish (minor proficiency)