



→ Pengju (PJ) Shang

Associate

1540 El Camino Real
Suite 120
Menlo Park, CA 94025

T: +1.650.352.1971

pshang@sheppardmullin.com

Pengju (PJ) Shang is an associate in the Intellectual Property Practice Group in the firm's Silicon Valley office.

Areas of Practice

PJ works on a variety of intellectual property matters, including patent prosecution, strategic portfolio development and client counseling. With his academic and industrial experience, PJ prepares and prosecutes patent applications covering a wide range of technology fields, including microprocessor architecture, hardware and software solutions for accelerating AI training and inferencing, sparse AI accelerators, GNN accelerators, AI-based drug discovery, machine learning, artificial intelligence, blockchain, cloud computing, distributed filesystem, storage system, social media, and Internet communication.

In his previous career as a software engineer, PJ was trained to design and develop complex technical inventions during his tenure at Google with cloud/platform team, and at EMC with storage filesystem team. As an inventor, PJ received numerous granted patents from United States Patent & Trademark Office (USPTO).

PJ's academic background includes a Ph.D degree in Computer Engineering and Computer Architecture in the US. During his Ph.D study, PJ authored a list of conference publications and journal publications covering research fields including large-scale data management, cloud, database, file/storage system, machine learning, power efficient and high-performance computing.

Articles

- Comparison and analysis of the way for Chinese patent applications to enter the United States
07.25.2022

Intellectual Property Law Blog Posts

- "Protecting Semiconductor Chip Design under the Semiconductor Chip Protection Act of 1984 (SCPA) – Part II (Infringement and Defense)," January 11, 2023
- "Protecting Semiconductor Chip Design under the Semiconductor Chip Protection Act of 1984 (SCPA) – Part I (Registration and Inspection)," January 11, 2023
- "Patent Protection on AI Inventions," August 30, 2021

Publications

- Co-Author, "TRAID: Exploiting Temporal Redundancy and Spatial Redundancy to Boost Transaction Processing Systems Performance," IEEE Transactions on Computers, Vol. 61, No. 4, pp 517-530, April 2012
- Co-Author, "Supporting HPC Analytics Applications with Access Patterns using Data restructuring and Data-centric scheduling techniques in MapReduce," IEEE Transactions on Parallel and Distributed Systems, March 7, 2012. IEEE Computer Society Digital Library.
- Co-Author, "A New Placement-ideal Layout for Multi-way Replication Storage System," IEEE Transactions on Computers 60(8): 1142-1156, 2011
- Co-Author, "A Novel Power management for CMP Systems in Data-intensive Environment," The 25th IEEE International Parallel & Distributed Processing Symposium (IPDPS) May 16-20, 2011, Anchorage (Alaska) USA. (Acceptance rate 20% 112/571)
- Co-Author, "A Scalable Reverse Lookup Scheme using Group-based Shifted Declustering Layout," The 25th IEEE International Parallel & Distributed Processing Symposium May 16-20, 2011, Anchorage (Alaska) USA. (Acceptance rate 20% 112/571).
- Co-Author, "Nexus: A Novel Weighted-Graph-based Prefetching Algorithm for Metadata Servers in Large Scale Storage Systems," IEEE transactions on computers, Vol. 59, No. 1, pp1-15, January 2010
- Co-Author "Concentric Layout, a New Scientific Data Distribution Scheme in Hadoop File System," IEEE International Conference on Networking, Architecture, and Storage (NAS'2010). pp.231~239
- Co-Author, "Record - Based Block Distribution (RBBD) and Weighted Set Cover Scheduling (WSCS) in MapReduce" Accepted by Journal of Internet Services and Applications
- Co-Author, "Co-located Compute and Binary File Storage in Data-intensive Computing"
- Co-Author, "Exploiting the Overlap Between Temporal Redundancy and Spatial Redundancy in Storage System (Poster)," 7th USENIX Conference on File and Storage Technologies (FAST '09)
- Co-Author, "Fast Recovery Using Optimal and Near-Optimal Parallelism in Data-Intensive Computing," 3rd Petascale Data Storage Workshop Supercomputing '08, Held in conjunction with SC08 and sponsored by the DOE SciDAC Petascale Data Storage Institute (PDSI)

Practices

China

Intellectual Property

Industries

Artificial Intelligence

Blockchain

Blockchain and Fintech

Fintech

Education

J.D., University of Santa Clara, 2019

Ph.D., Computer Engineering, University of Central Florida, 2011

M.S., Computer Science, Huazhong University of Science and Technology, 2007

B.S., Computer Science, Jilin University, 2005

Admissions

California