



Mohammad Zaryab

PATENT AGENT

Mohammad is a patent agent in the firm's Intellectual Property group.



Practices

[Patent](#)

Education

Columbia University, MSEE, 2017

William E. Macaulay Honors College - Grove School of Engineering (CUNY), BE, summa cum laude, 2015

Offices

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Mohammad is a patent agent that has prepared and prosecuted patent applications for clients from a wide range of industries including media guidance, virtual reality, network communications, speech recognition, gaming technology, and artificial intelligence (e.g., deep learning & machine learning). He helps clients identify inventive aspects of potential patents and represents applicants in front of the USPTO such as by responding to office actions and conducting examiner interviews. He additionally has experience in analyzing the validity of patents, preparing claim charts, and evaluating third party patent risks to provide portfolio direction to clients. Mohammad specializes in software-based applications, having prior hands-on work experience in neural networks, the Internet of Things (IoTs), big data, and medical devices.

Previous Work

Prior to joining ArentFox Schiff, Mohammad worked at an IP boutique firm. In terms of technical experience, Mohammad has been a product developer and a research assistant at multiple laboratories including the Structure Function Imaging Laboratory at Columbia University, the Robotics Laboratory at the City College of New York, and the Optical Communications & Photonic Systems Laboratory at the City College of New York.

In his research, Mohammad has had experience with several state-of-the-art technologies in fields such as machine learning, optics, and computer vision. As a research assistant at Columbia University, Mohammad developed a machine learning algorithm used in heart surgeries. The algorithm, programmed using MATLAB, detects whether a catheter inserted in the heart has made contact with heart tissue – allowing surgeons to properly perform operations (e.g., ablation) to treat arrhythmias. As a product developer, Mohammad developed a Visual C++ software that assesses ultrasound image quality in a portable ultrasound machine. The ultrasound machine project additionally involved a hardware component in which Mohammad created a womb simulator using touch sensors, microcontrollers, and various signal processing filters.

Professional Activities

- Member of Tesla Leadership Circle at Columbia University
- Member of the Institute of Electrical and Electronics Engineers (IEEE)
- Member of Tau Beta Pi: The Engineering Honor Society

Publications, Presentations & Recognitions

Publications

- [Dual-modality Optical Spectroscopy and Optical Coherence Tomography Ablation Catheter for Intraprocedural Assessment of Cardiac Lesion Development](#), The Optical Society of America (OSA), April 2018
- [Towards optical spectroscopic anatomical mapping \(OSAM\) for lesion validation in cardiac tissue](#), SPIE Proceedings Paper, April 2017
- [Robust classification of contact orientation between tissue and an integrated spectroscopy and radiofrequency ablation catheter](#), SPIE Proceedings Paper, February 2017

Recognitions

- Electrical Engineering Research Award, Electrical Engineering Department of Columbia University, May 2017
- Social Impact Innovation Semifinalist, Unite for Sight - Global Health & Innovation Conference (GHIC), April 2017
- Engineering Alumni Medal: Electrical Engineering, City College of New York, May 2015
- Valedictorian Candidate of the City College of New York, May 2015
- Nikola Tesla Electrical Engineering Scholar, Electrical Engineering Department of Columbia University, March 2015

Life Beyond the Law

In his spare time, Mohammad mentors high school and college students to help them identify and navigate their career tracks. He is an ambassador of New York Edge, having appeared on FOX NY News to discuss his involvement in education development in underserved communities.

Bar Admissions

[US Patent and Trademark Office](#)