

# JIE LIAN, PH.D.

ASSOCIATE

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## OVERVIEW

Jie's practice includes the preparation and prosecution of U.S., international, and foreign patent applications, and performing patentability and prior art searches and freedom-to-operate analysis.

Jie's professional experience includes more than 10 years of academic research and more than 13 years of industrial research and development, spanning areas including medical devices, mobile health, signal/image processing, and wearable technology, among others. He specializes in signal processing, statistical analysis, physiological modeling, and algorithm development for embedded systems. Jie has published three book chapters and more than 70 peer-reviewed research articles, and served as an expert reviewer for more than a dozen scientific journals. He is the recipient of more than 40 issued or pending U.S. patents and dozens of European patents.

Jie joined Klarquist as a Patent Agent in 2017 and became an Associate in 2020.

## PROFESSIONAL EXPERIENCE

- ▶ Klarquist Sparkman | Patent Agent, 2017 – 2020 | Portland, OR
- ▶ Ganz Pollard | Patent Agent, 2016 – 2017 | Hillsboro, OR
- ▶ Micro Systems Engineering | Staff Engineer, Project Manager, 2002 – 2015 | Lake Oswego, OR

## PROFESSIONAL ACTIVITIES

- ▶ 2018 Session Chair, 40th Annual International Conference of IEEE-EMBS
- ▶ 2005 – present, Senior Member, Institute of Electrical and Electronics Engineers (IEEE)
- ▶ 2015 – present, Member, IEEE Technical Committee on Wearable Biomedical Sensors and Systems
- ▶ 2013 – present, Member, IEEE Internet of Things Community

## EDUCATION

*J.D., summa cum laude,  
Lewis & Clark Law School,  
2020*

M.B.A., Healthcare  
Management, Oregon  
Health & Science  
University/Portland State  
University, 2011

Ph.D., Bioengineering,  
University of Illinois  
Chicago, 2002

M.S., Biomedical  
Engineering, Zhejiang  
University, 1995

B.S., Biomedical  
Engineering, Zhejiang  
University, 1992

## ADMISSIONS

Oregon, 2020

U.S. Patent and Trademark  
Office, 2012 (Reg. No.  
70,556)

## PRACTICE AREAS

Copyright  
Patent  
Trademark

**Klarquist**

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## HONORS & AWARDS

- ▶ Sole Recipient of the *Jan Jancin Award* for intellectual property law | 2019
- ▶ *Biotronik Innovation Award* | 2008 and 2013
- ▶ *Best Presentation Award*, National Collegiate Inventors & Innovators Alliance IdeaLab | 2011

## PRESENTATIONS & PUBLICATIONS

- ▶ Lian J. Twitters Beware: The Display and Performance Rights. 21 Yale J.L. & Tech. 227, 2019
- ▶ "Oracle America v. Google, Free Java: Fair or Unfair?" IPWatchdog, 7/9/2018
- ▶ Lian J, Garner G, Muessig D. Biventricular capture verification by means of morphological analysis of intracardiac electrogram. *Europace*, 15:1677-1683, 2013
- ▶ Lian J, Wang L, Muessig D. A simple method to detect atrial fibrillation using RR intervals. *Am J. Cardiol.*, 107: 1494-1497, 2011
- ▶ Lian J, Muessig D, Lang V. Risk assessment of R-on-T event based on modeled QT-RR relationship. *Pacing Clin. Electrophysiol.*, 34(6): 700-708, 2011
- ▶ Lian J, et al. Clinical appointment process: improvement through schedule defragmentation. *IEEE Eng. Med. Biol. Mag.*, 29(2): 127-134, 2010
- ▶ Lian J, Garner G, Muessig D, Land V. A simple method to quantify the morphological similarity between signals. *Signal Processing*, 90(2): 684-688, 2010
- ▶ Lian J. Unravel the complexity of heart rhythm: a modeling approach. In L. A. Vespry (Ed): *Cardiac Arrhythmia Research Advances*. Nova Science Publishers, pp. 9-31, 2007
- ▶ Lian J, Muessig D, Lang V. Ventricular rate smoothing for atrial fibrillation: a quantitative comparison study. *Europace*, 9: 506-513, 2007
- ▶ Lian J, Muessig D, Lang V. On the role of ventricular conduction time in rate stabilization for atrial fibrillation. *Europace*, 9: 289-293, 2007
- ▶ Lian J, Clifford GD, Muessig D, Lang V. Open source model for generating RR intervals in atrial fibrillation and beyond. *Biomedical Engineering Online*, 6:9, 2007
- ▶ Lian J, Muessig D, Lang V. Computer modeling of ventricular rhythm during atrial fibrillation and ventricular pacing. *IEEE Trans Biomed Eng*, 53: 1512-1520, 2006

## TECHNOLOGY AREAS

Software & Internet  
Technology  
Electrical & Semiconductors  
Mobile Devices &  
Applications  
Consumer Products  
Life Sciences &  
Biotechnology  
Mechanical  
Medical Devices &  
Diagnostics

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## PRESENTATIONS & PUBLICATIONS

- ▶ He B, Lian J. High-resolution spatio-temporal neuroimaging of brain activity. *Crit Rev Biomed Eng*, 30(4-6): 283-306, 2002
- ▶ Lian J, Goldstein A, Donchin E, He B. Cortical potential imaging of episodic memory encoding. *Brain Topogr*, 15: 29-36, 2002
- ▶ Lian J, He B. A minimal product method and its application to cortical imaging. *Brain Topogr*, 13: 209-217, 2001
- ▶ He B, Lian J, Spencer KM, Dien J, Donchin E. A cortical potential imaging analysis of the P300 and novelty P3 components. *Hum. Brain Mapp*, 12: 120-130, 2001
- ▶ He B, Lian J, Li G. High-resolution EEG: a new realistic geometry spline Laplacian estimation technique. *Clin Neurophysiol*, 112: 845-852, 2001