WILSON SONSINI

Benjamin Hoar
PATENT AGENT

Patents and
Innovations
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FOCUS AREAS

Artificial Intelligence and
Machine Learning

Climate and Clean
Technologies

Patents and Innovations

Software

EXPERIENCE

Dr. Benjamin (Ben) Hoar is a patent agent in the Century City office of Wilson Sonsini Goodrich & Rosati, where he focuses patent work related to software, artificial intelligence, clean energy technology, and applications of artificial intelligence in the biotech and medical device domains.

Ben obtained his Ph.D. in chemistry from UCLA in 2023 for research into applications of machine learning in electrochemistry. His work spanned the electrochemical device and process optimization, computer vision, natural language processing, education, and clean tech fields.

Prior to UCLA, Ben gained experience in biosensing at the University of Miami. He has published in each of these fields while also having studied photocatalysis UT Austin.

CREDENTIALS

Education
- Ph.D., Chemistry, University of California, Los Angeles, 2023
- M.S., Chemistry, University of California, Los Angeles, 2020
- B.S., Chemistry, University of Miami, 2018

Admissions
- U.S. Patent and Trademark Office

INSIGHTS

Select Publications

- Co-author with R. Ramachandran, M. Levis-Fitzgerald, E.M. Sparck, K. Wu, and C. Liu, "Enhancing the Value of Large-Enrollment Course Evaluation Data Using Sentiment Analysis," *Journal of the Chemical Education*, 2023
- Co-author with W. Zhang, S. Xu, R. Deeba, C. Costentin, Q. Gu, and C. Liu, "Electrochemical Mechanistic Analysis from Cyclic Voltammograms Based on Deep Learning," *ACS Measurement Science, Au*, 2022
- Co-author with Y. Chen, J. Wang, and C. Liu, "Machine Learning-Based Inverse Design for Electrochemically Controlled Microscopic Gradients of O_2 and H_2O_2," *PNAS*, 2022
- Co-author with S. Lu, and C. Liu, "Machine-Learning-Enabled Exploration of Morphology Influence on Wire-Array Electrodes for Electrochemical Nitrogen Fixation," *The Journal of Physical Chemistry Letters*, 2020
- Co-author with S.K. Karma, M. Micic, S. Li, S. Paudyal, E.M. Zahran, and R.M. Leblanc, "Conjugation of Carbon Dots with β-Galactosidase Enzyme: Surface Chemistry and Use in Biosensing," *Molecules*, 2019