

Ronen Adato, PhD

Associate

T +1 (617) 248-4814 | radato@choate.com



Dr. Ronen Adato leverages his extensive background in nanotechnology and electrical engineering in providing patent protection to a variety of academic and business clients.

As a postdoctoral fellow in Boston University's Department of Electrical and Computer Engineering (with additional appointments in the Photonics Center and Rafik B. Hariri Institute for Computing and Computational Science and Engineering), Ronen focused his research on creating nanophotonic and computational tools for sensing, microscopy, and spectroscopy. He oversaw projects aimed at developing new techniques for characterizing semiconductor integrated circuits for failure analysis and security testing applications. Ronen also secured funding for and managed the development of a multi-user near-field microscopy facility as part of the National Science Foundation Major Research Instrumentation program. Ronen's PhD research focused on development of nanoscale antennas to enhance the sensitivity of infrared absorption spectroscopy measurements used for study of protein structure-function relationships and disease diagnostics.

PRACTICE AREAS

Intellectual Property Protection

Technology

REPRESENTATIVE ENGAGEMENTS

- Development and prosecution of patent portfolios for start-ups, venture-backed companies, public companies, and research institutions.
- Competitive landscape searching and analyses.
- IP diligence support for financing transactions, mergers, and acquisitions.
- Assists patent prosecution and litigation teams in AIA post grant review proceedings.

PUBLICATIONS AND PRESENTATIONS

- "Rapid mapping of digital integrated circuit logic gates via multi-spectral backside imaging," *first author, arXiv preprint*, 2016.
- "Physical modeling of interference enhanced imaging and characterization of single nanoparticles," *co-author, Optics Express*, 2016.

EDUCATION

Boston College
JD, 2022

Boston University
PhD, 2013, *Electrical and
Computer Engineering*

The University of Alabama
in Huntsville
MS, 2008, *Electrical
Engineering*

Duke University
BS, 2005, *Electrical
Engineering*

ADMISSIONS

Massachusetts

- “Integrated nanoantenna labels for rapid security testing of semiconductor circuits,” speaker, Optical Society of America Frontiers in Optics Meeting, 2015.
- “Detecting Hardware Trojans using backside optical imaging of embedded watermarks,” *co-author, Design Automation Conference, 2015.*
- “Engineering mid-infrared nanoantennas for surface enhanced infrared absorption spectroscopy,” *first author, Materials Today, 2015.*
- “In-situ ultra-sensitive infrared spectroscopy of biomolecule interactions in real-time with plasmonic nanoantennas,” *first author, Nature Communications.*
- “Ultra-sensitive vibrational spectroscopy of protein monolayers with plasmonic nanoantenna arrays,” *first author, Proceedings of the National Academy of Sciences, USA.*