## JESSE DYLAN CROSSNO, PhD

## **EDUCATION**

- 2017 Harvard University, PhD Applied Physics Harvard Habicht Fellow
- 2013 Harvard University, SM Applied Physics Harvard Distinction in Teaching Award
- 2012 Harvard Business School, Mini-MBA
- 2010 UC Santa Barbara, BS Physics First in class, Highest Honors Award, Research Honors Award
- 2008 **Santa Barbara City College**, Computer Science *Student of the Year*

## EXPERIENCE

- 2017 Present CTO. CrossnoKaye Physics and statistical approaches to energy management of climate controlled spaces
- 2015 2017 Technical Consultant. Lineage Logistics Data analytics and predictive algorithms of industrial cold storage
- 2014 2017 Visiting Scientist. Raytheon-BBN Technologies Graphene-based photon detectors for quantum cryptography and quantum computing
- 2014 2017 Graduate Researcher. Harvard University. Philip Kim Lab. Thermal transport in two-dimensional solids via statistical noise analysis
- 2011 2014 Graduate Researcher. Harvard University. Lene Hau Lab. *Quantum mechanics within a black hole environment via ultra-cold quantum gases*
- 2010 2011 Staff Scientist. UC Santa Barbara. Deborah Fygenson Lab. Viral decoys used to increase the survival rate of US troops exposed to respiratory pathogens
- 2009 2010 Researcher. UC Santa Barbara. S. James Allen Lab. Electron transport in field-effect transistors operating beyond threshold
- 2007 2009 Research Assistant. UC Santa Barbara and Sandia National Labs Plasmon-based terahertz sensors for traditional and biological weapon detection

## SELECT PUBLICATIONS AND PATENTS

- 2018 Guided modes of anisotropic (VdW) materials investigated by (NSOM), ACS Photonics
- 2017 Graphene-Based Josephson-Junction Single-Photon Detector, Phys. Rev. Applied
- 2017 Electronic Thermal Conductance of Graphene via Electrical Noise, *Harvard ProQuest*
- 2016 Observation of the Dirac Fluid and the Breakdown of the Wiedemann-Franz Law in Graphene, *Science*
- 2016 Transport in Inhomogeneous Quantum Critical Fluids and in the Dirac Fluid in Graphene, *Phys. Rev. B*
- 2015 Development of High Frequency and Wide Bandwidth Johnson Noise Thermometry, *Applied Physics Lett.*
- 2009 A Plasmonic Terahertz Detector with a Monolithic Hot Electron Bolometer, J. Phys. Cond. Mat.
- A Narrowband Plasmon Terahertz Detector with a Monolithic Hot Electron Bolometer, *SPIE OPTO* Patent Numbers: US10323878, C3124.10002US01

crossno@crossnokaye.com