CURRICULUM VITAE

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(a) Education & Training

Carnegie Mellon University	Pittsburgh, PA	Particle Physics	Researcher, Present
Case Western Reserve University	Cleveland, OH	Mathem. Physics	B.S., 2019
Case Western Reserve University	Cleveland, OH	Music	B.A., 2019

(b) Research & Professional Experience

2019 – present	Researcher with GlueX collaboration at Jefferson Labs
2019 – 2020	Teaching Assistant for Intro Physics Lab at CMU
Summer 2019	Researcher at Folio Photonics in Solon, OH
2018 – 2019	Teaching Assistant for Intro E&M at CWRU
2015 – 2019	Researcher with Nanoplasm Lab at CWRU

(c) Publications

1. M. ElKabbash, E. Ilker, T. Letsou, N. Hoffman, A. Yaney, M. Hinczewski, and G. Strangi. Iridescence-free and narrowband perfect light absorption in critically coupled metal high-index dielectric cavities. *Optics Letters*, 42(18):3598, September 2017.
2. Mohamed ElKabbash, Ana Sousa-Castillo, Quang Nguyen, Rosalia Mariño-Fernández, Nathaniel Hoffman, Miguel A. Correa-Duarte, and Giuseppe Strangi. Tunable Black Gold: Controlling the Near-Field Coupling of Immobilized Au Nanoparticles Embedded in Mesoporous Silica Capsules. *Advanced Optical Materials*, 5(21):1700617, November 2017.
3. Mohamed ElKabbash, Kandammathe Valiyaveedu Sreekanth, Arwa Fraiwan, Jonathan Cole, Yunus Alapan, Theodore Letsou, Nathaniel Hoffman, Chunlei Guo, R Mohan Sankaran, Umut A Gurkan, Michael Hinczewski, and Giuseppe Strangi. Ultrathin-film optical coating for angle-independent remote hydrogen sensing. *Measurement Science and Technology*, 31(11):115201, November 2020.
4. Nathaniel Hoffman and Michael Widom. Cluster variation method analysis of correlations and entropy in BCC solid solutions. *arXiv:2007.13219 [cond-mat]*, July 2020. arXiv: 2007.13219 version: 1.