Nicholas Kantack

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Education

University of Oklahoma
Bachelor of Science: Engineering Physics
Graduated May 2016
Cumulative GPA: 3.97

University of Virginia
Master of Science: Electrical Engineering
Graduated December 2020
Cumulative GPA: 3.87

Work/Research Experience

Johns Hopkins Applied Physics Laboratory July 2018 - Present
Software Developer/Electrical Engineer

- Principal investigator for six internal research grants totaling $315,000 in funding
- Projects include AI research for human-machine teaming, XR sensor fusion and localization, state estimation machine learning, and thin film RF device design

IntriCon Corporation May 2016 - July 2018
Electronics Manufacturing Engineer

- Design and prototype sub-millimeter scale inductors for implantable medical devices
- Physical simulation and data analytics software design and support

Univ. of Oklahoma & South Dakota State Univ. January 2014 - May 2016
Undergraduate Research

- Characterize porous silicon solar cells, fit physical models to performance (OU - Senior research)
- Develop fabrication processes for organic perovskite solar cells (SDSU - Summer research)

Skills

Proficient Python, PyTorch, TensorFlow, Java, Javascript, C++, C#, Android, OpenSCAD, Agile, 3D printing, digital circuits, embedded devices, VR/AR, probability theory, statistical tests, modeling & simulation, machine learning, neural networks

Familiar CUDA, R, AutoCAD, Unity, Matlab, LaTeX, NodeJS, AngularJS, Docker, SQL, PCB design, RF systems, signal processing, NLP, Deep RL, robotics

Volunteering

Tutoring January 2014 - Present
OU Math center, JHU College Prep program

STEM Development May 2019 - Present
High school & college mentor, intern supervisor (APL)

Publications and Projects

Visit nickkantack.com for more information.