Theodore Chiu

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SKILLS

- Software Development (Java, Python, C, C++, embedded C)
- Systems design: Digital circuits, embedded systems, ASIC/FPGA design (SystemVerilog)
- Data Analysis: classification, regression, clustering, dimension reduction
- Machine Learning: Intermediate understanding of neural nets (Pytorch), Q-Learning (KerasRL) and Bayesian networks
- Hardware engineering: PCB design(OrCad/PSpice, Eagle, kiCad), Soldering/Hot air rework

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EXPERIENCE

Luna Innovations **Blacksburg, VA**

Systems Engineer *2022 - Present*

- Systems engineer in Lightwave Division supporting bleeding edge research of fiber optics
- Helped design software for fiber optic instruments that utilized Rayleigh backscatter OFDR (C++)
- Microsoft Hololens development for interactively displaying data (Unity & C#)
- Design calibration and testing tools for optical shape sensing
- Implemented software redesign to optimize an embedded system by offloading Fourier Transforms to DSP's

Heroes Jobs **San Francisco, CA**

CS Intern *Summer 2019*

- Worked in an early stage startup as an intern leveraging software design and automation to optimize rapid growth in order to secure next round of funding
- Created libraries and scripts to automate social media presence that lead to an increase in user-acquisition
- Created internet scrapers to mine data from various databases to identify and target potential users
- Analyzed user characteristics and behaviors to identify trends in userbase

Stanford Cognitive Systems and Neuroscience Lab – Stanford University **Palo Alto, CA**

Intern *June – November 2016*

- Worked in research lab environment as an intern to a post doctorate fellow assisting in research
- Implemented scoring algorithm and optimized UI for screener game designed to help children with dyscalculia.
- Collected and streamlined screener data for later analysis.

EDUCATION

Bachelor's Degree in Computer Engineering

Purdue University, West Lafayette, IN

REFERENCE: Upon request