**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

**EXPERIENCE**

[**Luna Innovations**](https://lunainc.com/) **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**](https://www.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**](http://med.stanford.edu/scsnl.html) **– 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