





# Shu-Yu (Stanley) Lin

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## EDUCATION

<b>National Taiwan University</b> Bachelor of Science in Electrical Engineering	Sep 2018 - present GPA: 3.64/4.3
<b>National Taiwan University</b> Bachelor of Arts in Political Science (Double major)	Sep 2019 - present GPA: 4.3/4.3

## WORK EXPERIENCE

<b>SW Intern</b> MIH Open EV Alliance	Sep 2022 - present Taipei, Taiwan
<b>Hardware Platform Application Engineer Intern</b> Intel Corporation	Jul 2021 - Jul 2022 Taipei, Taiwan
<ul style="list-style-type: none"><li>Contributor of <b>Highly Efficient Automatic PCIe Validation Tool Kit</b>, Responsible for <b>Linux</b> test environment setup by <b>Shell Script</b> and <b>Python</b>, providing OS image by <b>Clonezilla</b> for teams worldwide, Using <b>Python</b> to parse error log of <b>100,000+</b> lines within seconds for further usage. Enact code release and validation flow for the project.</li><li>Published multiple SOPs including Tool Kit testing environment set-up and instructions, OS image create and restore.</li></ul>	
<b>Field Application Engineer Intern</b> Arrow Electronics	Jul 2020 - Sep 2020 Taipei, Taiwan
<ul style="list-style-type: none"><li>RF team: RF circuit debug, impedance adjustment, Network analyzer manipulation, Circuit soldering</li><li>FPGA team: Writing Verilog and analyze the waveform provided by customers</li></ul>	

## RESEARCH

<b>Undergraduate Researcher</b> Media IC and System Lab(Advisor: Professor Shao-Yi Chien)	Sep 2021 - present Taipei, Taiwan
<ul style="list-style-type: none"><li>Topic: Federated Learning for Person Re-Identification</li><li>Objective: jointly optimize model for seen and unseen domain</li></ul>	
<b>Undergraduate Researcher</b> MicroSystem Research Laboratory (Advisor: Professor Tzi-Dar Chiueh)	Sep 2020 - Feb 2021 Taipei, Taiwan
<ul style="list-style-type: none"><li>Training quantized convolution neural network using Pytorch</li><li>Design pipelined multi-input format convolution MAC circuit</li></ul>	

## PROJECTS

<b>Bikesla</b> Embedded System Labs final project	2021 Fall GitHub Link
<ul style="list-style-type: none"><li>Made a device installed on a bicycle and developed iPadOS App to control the device via Bluetooth.</li><li>STM32 MbedOS programming, Swift programming for iPadOS App</li><li>C++, C, Swift</li></ul>	
<b>SWE Explore</b> Database Management final project	2021 Fall GitHub Link
<ul style="list-style-type: none"><li>Full stack project for software engineer job seeker to check salaries, locations and other features worldwide.</li><li>React.js, Django REST framework, PostgreSQL</li></ul>	
<b>Pipelined RISC-V CPU Design</b> Digital System Design final project	2021 Spring GitHub Link
<ul style="list-style-type: none"><li>Designed 5-stage pipelined RISC-V processor with instruction cache and data cache</li><li>Implemented branch prediction mechanism, L2 cache and compressed instructions</li><li>Verilog</li></ul>	

## ACHIEVEMENTS

<b>Presidential Award</b>	This award is given each semester to students ranking within the top 5% of their class	2019
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## TECHNICAL SKILLS

<b>Programming languages:</b> C++, Python, Go, MATLAB, Verilog	<b>Web Technologies:</b> Node.js, React.js, Django, GraphQL
<b>ML/AI:</b> Pytorch, Numpy, Pandas, Matplotlib	<b>Miscellaneous:</b> MySQL, postgresSQL, Git, Shell, L <sup>A</sup> T <sub>E</sub> X

## RELEVANT COURSEWORK

<b>Electrical Engineering:</b> Integrated Circuit Design, Computer Architecture, Digital System Design, Solid State Electronics, Embedded System Lab, Biomedical Engineering Lab, Electronic Design Automation
<b>Computer Science:</b> Algorithms, Data Structure, Machine Learning, Multimedia Security, Database Management, Computer Networks, Information Security, Web Programming
<b>Mathematics:</b> Linear Algebra, Differential Equation, Discrete Mathematics, Probability and Statistics, Signals and Systems