

## Yu-Hsuan (Ashley) Lu

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### EDUCATION

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<b>University of Southern California</b> <i>Master of Science in Computer Science</i>	<b>Los Angeles, United States</b> 2021 - 2023
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- 2021 Coursework: Algorithms, Programming Systems Design, Web Technologies, Artificial Intelligence
- Earned admission scholarship from USC Viterbi School of Engineering

<b>National Taiwan University</b> <i>Information System Training Program (continuing education)</i>	<b>Taipei, Taiwan</b> 2019
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- **Coursework:** Securities Trading Analysis with Python; Problem Solving with Python; Java Programming

<b>National Taipei University of Technology</b> <i>Bachelor of Science in Industrial Engineering and Management</i>	<b>Taipei, Taiwan</b> 2014 - 2018
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- **GPA:** 3.7 / 4.0; Earned Presidential Award (top 5% of class in spring 2017, fall 2018), 100% exchange student funding via Taiwan Ministry of Education Scholarship
- **Relevant Coursework:** Programming Language, Cloud-based Computing and Application, Commercial Website Design, Database Management, Automation Concept, Introduction of VR/AR in Workplace and its Design

### WORK EXPERIENCE

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<b>Wistron Corporation</b> (one of the largest ODM firms) <i>Software Engineer, OS and I/O Devices</i>	<b>New Taipei, Taiwan</b> 2019.8 – 2021.5
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- Work with OS and device driver vendors in Taiwan, China, Israel and other global offices to develop, debug and handle system software issues by analyzing dump files and using C language to change configuration settings for major notebook manufacturing clients, such as Lenovo
- Optimized Excel VBA tool that facilitates daily tracking of bugs from databases and makes it easier to cross-analyze bugs among different products

<b>TopOne Information</b> (a start-up ERP system developer) <i>Software Developer, ERP System</i>	<b>Taichung, Taiwan</b> 2018.7 – 2019.7
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- Utilized ASP.Net and MySQL to support Cloud-based Enterprise Resource Planning (ERP) system development
- UI/UX Improvement – Worked with UI/UX designers to redesign and improve user experience for Web-based ERP systems by unifying the buttons, layout and UI flow across each function
- Reports Creation – Retrieved data and created clear and effective reports, including quotes, customer orders, stock tracking, BOM lists, etc. for client needs in different industries

<b>TBI Motion Technology</b> (a producer of linear motion products) <i>Industrial Engineer Intern</i>	<b>New Taipei, Taiwan</b> 2017.7 – 2017.8
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- Led a team of 4 TBI Motion interns to establish relational databases to interpret factors impacting the product failure rate; proposed new manufacturing process flow that was predicted to reduce the failure rate by 13% and increase workforce utilization by 4% based on arena simulation software
- Used heuristic algorithms and Python to analyze production scheduling for the manufacturing of automatic tools

### Research Experience

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<b>Multiple-Criteria Decision Analysis</b>	2017.2 – 2018.2
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- Utilized data mining with Python to identify and analyze pertinent risk factors in critical infrastructure
- Conducted data analysis based on survey results from professionals, and proposed an integrated risk-assessment model to address the subjectivity and uncertainty in data
- Won Taiwan National Science Council Research Scholarship, and represented Taipei Tech to present the research in 2017 Capstone Design Presentation at Seoul National University of Science and Technology

<b>Smart Manufacturing Program</b>	2017.7 - 2017.12
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- Took part in academia-industry collaboration to guide smart manufacturing with TBI Motion Technology Inc. and Mechanical and Electrical Engineering interns
- Deployed single stream production scheduling with Python and MATLAB analysis techniques to visualize and analyze data from Internet of Things (IOT) sensors, cloud, and manufacturing execution system (MES)

### SKILLS, ACTIVITIES & INTERESTS

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**Area of Interests:** Distributed Systems, Web Services, Cloud Service, Agile Development, DevOps

**Skills:** Python, Java, SQL, MySQL, ASP.NET, JavaScript, JQuery, Bootstrap, HTML, CSS, Node.js, C++

**Activities:** Taiwan Ministry of Education International Volunteer Program, Student Ambassador, Student buddy club