# BOR-SHENG (ERIC) HUANG

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## EDUCATION

**University of Southern California (USC)**                                                     Los Angeles, CA
**Master of Science in Computer Science**                                               August 2022-December 2024
- Highlighted Courses: Web Technologies, Analysis of Algorithms, Machine Learning for Data Science, Database Systems

**National Cheng Kung University (NCKU)**                                                     Tainan, Taiwan
**Bachelor of Science in Electrical Engineering**                                     September 2017-June 2021
- Highlighted Courses: Computer Algorithm, Operating System, Data Structures, Algorithms and Applications to IT and Artificial Intelligence, Image Processing, Fundaments of Data Analysis

## WORK EXPERIENCE

**HighPoint Technologies, Inc.**                                                     Fremont, California
**Software Engineer Intern**                                                         May 2024-August 2024
- Enhanced customer engagement and data collection by coding new features in JavaScript on the HighPoint website using Wix
- Participated in the Future of Memory and Storage (FMS 2024) and fielding questions from industry professionals.

**Taiwan Semiconductor Manufacturing Company (TSMC)**                                 Hsinchu, Taiwan
**Software Engineer Intern**                                                         July 2023-August 2023
- Developed a Config Center Platform for TSMC manufacturing engineers to easily query or update different configurations in the Wafer Fabrication Process, streamlining user experiences and resulting in a 50% time reduction for engineers
- Designed system by Domain-Driven Design (DDD). Crafted a responsive frontend using Angular, enhanced with PrimeNG and Ag-Grid libraries, and a high-performance backend utilizing FastAPI and Python
- Leveraged Azure pipelines for automated build, test, and deployment workflows

**Advanced Computer Vision Lab (ACVLAB), National Cheng Kung University**
**Research Assistant**                                                               March 2021-December 2021
- Devised deformable convolutional semantic segmentation neural network for autonomous vehicles on scene understanding
- Constructed automatic digit recognition by reforming Yolo-v5 and Resnet OCR

## ACADEMIC PROJECTS

**"Yelp Business Search App on IOS" (Front-End: Swift/ Back-End: Node.js)**          August 2022-December 2022
- https://youtu.be/nXVQoC_pkLc (Specific description is right below video)

**"Yelp Business Search Website on GCP" (Front-End: Angular/ Back-End: Node.js)**    August 2022-December 2022
- https://youtu.be/LQl_pRFscUU (Specific description is right below video)

**"Developing Automatic Digit Recognition and Processing Improvement"**              March 2021-December 2021
**Industry-Academia Collaboration Project, Advanced Computer Vision Lab (ACVLAB) at NCKU**
- Managed the project and led company to perform field type identification and automatic text recognition of invoices and bills by reforming Yolo-v5 and deep-text-recognition-benchmark; improved accuracy to 97.72%

**"Conducted AI to Predict and Analyze Outcomes of Sexual Assault Cases Based on Evidence"**     Mar. 2021-Sep. 2021
- Applied Machine Learning Classifiers and Deep Learning (LSTM, BERT) to develop an AI-predicting system
- Constructed a chatbot to help victims substantially; presented results at the Legal-Tech Hackathon

## AWARDS

Outdoor Semantic Segmentation Challenge (DAGM GCPR 2021), 1st Place Award                September 2021
- Designed an innovative deep neural network on scene understanding in unstructured environments for autonomous vehicles

## PUBLICATIONS

**Bor-Sheng Huang (First Author**), Chih-Chung Hsu, Wo-Ting Liao, Xian-Yun Wang, Han-Yi Kao
"Deformable Convolutional Semantic Segmentation Neural Network for Non-Rigid Scenes"
2022 IEEE International Conference on Acoustics, Speech and Signal Processing (ICASSP), April 2022
- https://ieeexplore.ieee.org/document/9747586

## LEADERSHIP

**Captain**                                                                          September 2018-June 2019
- Baseball Team of NCKU Electrical Engineering Department

## SKILLS

Software Application: Angular, NodeJS, Ajax, Swift, Python, C/C++, GCP, AWS, Azure, JavaScript, Java, HTML, CSS, Docker, Markdown