Yilin Li

Website: https://yilinli-um.com/
Github: https://github.com/Phantom-eva

Email: yilinliz@umich.edu
liyilin2967@gmail.com
Mobile: +1-734-450-8721

Education Background

- **University of Michigan - Ann Arbor** — MI, USA
  Master of Science in Electrical and Computer Engineering (Minor: Computer Vision) — *Sep 2021 - Apr 2023*
  GPA: 4.00/4.00
  Courses: Data Manipulation and Analysis, Machine Learning, Computer Vision, Database App Design, Intermediate Programming

- **Zhejiang University** — Hangzhou, China
  Bachelor of Engineering in Electronic Information (Minor: Information Engineering) — *Sep 2017 - June 2021*
  GPA: 3.68/4.00 (**Major:** 3.82/4.00)
  Courses: Numerical Analysis Methods, Digital Image Processing, Data Analysis and Algorithm Design, Computer Composition and Design

Skills Summary

- **Programming languages**: C/C++, Python, Java, JavaScript, HTML, CSS, Shell, SQL, Julia, Verilog
- **Tools & Frameworks**: Git, AWS, Linux, Docker, MongoDB, PyTorch, TensorFlow, Django, React, Flask, Pandas

Related Experience

- **Huawei Hangzhou Research Institute** — Hangzhou, China
  Software Development Engineer Intern — *July 2020 - Aug 2020*
  - **Code Optimization**: Reduced the cyclomatic complexity of more than 25 functions.
  - **Compiler Bug Fix**: Updated dependent library versions and fixed conflicts, successfully located and solved the failure of several example test cases using the GDB debugger.
  - **New Feature Development**: Learned LLVM basics and developed a new pass to estimate compilation time.

- **Tokyo Institute of Technology** — Tokyo, Japan
  Summer School — *July 2019*
  - **Assemble Program and Analysis**: Implemented and optimized various functions of a basic calculator.
  - **FPGA-implemented Applications**: Implemented a multi-machine interactive chat program and a chess game program.

Research and Projects

- **A Compiler For The COOL Programming Language**:
  ◦ Implemented the four phases of the compiler, including lexical analysis, syntax analysis, semantic analysis, and code generation.
  ◦ Successfully compiled the COOL high-level language to MIPS assembly and executed successfully on SPIM, the MIPS simulator.
  Tech: C++ (Mar 2023 - June 2023)

- **A Movie Recommendation System Using Collaborative Filtering**:
  ◦ Designed and implemented a movie recommendation system with good user interface.
  ◦ Provided reasonable movie recommendation results based on filter criteria keywords.
  Tech: HTML, CSS, JavaScript, Django, SQLite (Oct 2022 - Dec 2022)

- **A Student Management System**:
  ◦ Design and implement a student management system with different permissions of student teaching assistants and teachers.
  ◦ Realized the functions of adding courses, adding grades, modifying student information, etc.
  Tech: Python, HTML, CSS, JavaScript, Django(Jan 2022 - Apr 2022)

- **Image Inpainting Using GAN, Partial Convolution And Region Normalization**:
  ◦ Proposed a model based on a conditional GAN, replaced all convolutional layers with partial convolutional layers.
  ◦ Implemented Region Normalization in the Generator, and achieved better qualitative and quantitative results.
  Tech: Python, Computer Vision, GAN (Oct 2021 - Dec 2021)

Honors and Awards

- Outstanding Graduate of Zhejiang University - 2021
- Meritorious Winner in Mathematical Contest in Modeling - 2020
- University Student Scholarship of Texas Instruments - 2019
- Outstanding Volunteer of Zhejiang University - 2019

Other Experience

- **Volunteer teacher in elementary school** — Jinhua, China
  Taught more than 30 students science and managed the daily affairs of the class — *Summer 2018*