Karl Hallsby

karl.hallsby.com   karl@hallsby.com   LINKEDIN: karlhallsby

Education

M.S. Computer Engineering, Specializing in Computer Systems Software, Illinois Institute of Technology
  Expected Graduation: 2022.

B.S. Computer Engineering
  - Illinois Institute of Technology Expected Graduation: 2022. **GPA**: 3.953
  - Study Abroad: Lunds Tekniska Högskola Lund, Sweden, 2019 — 2020

Course Work

Digital System Design	DC/AC Circuit Analysis	Computer Architecture and Assembly
Thermo-Fluid Dynamics	Probability and Statistics	Complex Variables and Matrix Algebra
Secure System Design	Network Architecture	Concepts of Programming Languages
Systems Programming	Functional Programming	Object-Oriented Programming
Compilers	Operating Systems	Data Structures and Algorithms

Proficiencies

Programming Languages
- C
- MC68k Assembly
- MIPS
- Java
- Python 3
- Haskell

Software
- Git
- LaTeX
- LINUX
- NIX
- Microsoft Office Suite

Hardware
- Oscilloscope
- Analog/Digital Function Generator
- Digital Logic Analyzer

Human Languages
- English, Native.
- Spanish, Fluent.
- Swedish, Beginner.

Professional Experience

Intern, Mazarine Ventures, Chicago, IL   JUL 2020 — AUG 2020
Technical Specialist   MAY 2019 — AUG 2019

- Automated and refined deal flow database with partners in VC firm.
- Redesigned and optimized website.
- Unified digital presence through common media collection and sharing tool.
- Organized and documented networking configuration of firm's online resources.

Intern, Nalco Water, an Ecolab Company, Naperville, IL   MAY 2018 — AUG 2018
Technical Manual Specialist   DEC 2017 — JAN 2018

- Reviewed, revised, edited, and drafted technical manuals for equipment used in water treatment.
- Created training materials for new employees and helped develop training curriculum.
- Created automated templates and formatting macros for others to use in developing new manuals adhering to department standards.
- Created code in VBA for automated pricing tools, integrating MS Word and MS Excel, and developed training materials for sales team.
- Using Adobe RoboHelp, converted manuals to a cloud-based HTML5 version, allowing access to manuals from mobile phones, tablets, and laptop computers.

Other Activities

Triangle Fraternity, Armour Chapter Fileserver/Website Administrator
CyberHawk Security
    Participate in bug bounties, capture-the-flag competitions
Eta Kappa Nu, HKN — Member of IEEE honor society
Martial Arts Club — Vice President (2018), 3$^{\text{rd}}$ Degree Black Belt, Tang Soo Do Instructor

Honors

Illinois Institute of Technology — Dean's List	2017 — 2019
Illinois Institute of Technology — Camras Scholarship	2017 — Present