

Karl Hallsby

karl.hallsby.com

karl@hallsby.com

LINKEDIN: karlhallsby

Summary

Responsible and independent self-starter. Quick-learning, and goal-oriented Masters degree student with knowledge of computer hardware and software design, and experience in leading projects in a multinational corporation. Expertise in digital hardware design, software engineering, and system security.

Technical Proficiencies

Programming Languages

C, C++, Java, Python 3, Haskell

Software

Git, L^AT_EX, LINUX, NIX

Hardware

Oscilloscope, Digital Logic Analyzer

Professional Experience

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

Worked with partners in VC firm to refine and automate deal flow database.
Redesigned and automated website.

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

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.
Developed system for version control.

JUN 2015 — AUG 2017 | Starbucks, Naperville, IL
Barista

Reported to the store manager, made handcrafted beverages, maintained clean facilities that exceeded health inspections.
Trained new employees on drink creation and standards.

Education

M.S. Computer Engineering, Specializing in Computer Systems Software, Illinois Institute of Technology

Expected Graduation: 2022. Chicago, IL.

B.S. Computer Engineering, Illinois Institute of Technology

Expected Graduation: 2022. Chicago, IL.

Course Work

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

Honors

Illinois Institute of Technology — High Honors Roll	2017 — 2019
Illinois Institute of Technology — Camras Scholarship	2017 — Present
Batavia High School — Highest Honor Roll (> 4.375 GPA)	2013 — 2017

Other Activities

Triangle Fraternity, Armour Chapter

Act as system administrator for the chapter's fileserver and webpage.

CyberHawk Security

Participate in bug bounties, capture-the-flag competitions

Eta Kappa Nu, HKN

Member of the IEEE honor society

Martial Arts Club

Former Vice President.

Ran meetings, Organized group events, and Coordinated with school to ensure the club's activities run smoothly.

Still actively teaching classes.

Interests

Tang Soo Do

Attending martial arts classes for 15 years. Currently 3rd degree black belt in Tang Soo Do. Certified instructor of Tang Soo Do.

Downhill Skiing

Music

Played oboe for 10 years. Member of Batavia High School's highest rated orchestra, winning state awards.