Chris Nelson

Entry Level Software Engineer
ChrisNelson.COEN2020@gmail.com | https://www.linkedin.com/in/cn1251/ | https://github.com/Chris300127

Coding Languages: Python 3, C, C++, Java
Technologies: Linux/CLI, OpenCV, NumPy, scikit-learn, pySerial

EDUCATION

Bachelor of Science in Computer Science & Engineering **September 2016 – June 2020**
Santa Clara University, Santa Clara, CA – *3.4 GPA*

Related Coursework: Abstract Data Structures, Advanced Data Structures, Theory of Algorithms, Programming Languages, Software Engineering, Machine Learning, Web Information Management, Operating Systems, Embedded Systems, Computer Architecture, Computer Networks, Logic Design

PROFESSIONAL EXPERIENCE

Software Engineering Intern – Festo Corporation July 2019 – June 2020

- Redesigned and built a Python GUI app to test and calibrate a high accuracy pressure controller
- Optimized the workflow for testing and calibration of the product as measured by ease of use and reduction in testing time from hours to minutes by streamlining and parallelizing the code
- Created sub-modules that could run certain tests autonomously
- Further developed skills in working with people and communicating effectively within a team

IT Specialist – Personal Tech Help Business June 2017 – January 2020

- Provided onsite IT help to local clients by migrating old photos & data, updating and debugging software, troubleshooting hardware, and ensuring a better overall user experience
- Helped clients further understand their devices by answering questions in an understandable way
- Taught kids the basics of programming by helping them build a game in Python
- Formed good relationships with customers by being friendly, informative, and knowledgeable

PROJECTS

Basil Bot (SCU Senior Design Project) – Python

- Implemented computer vision program (using OpenCV) to detect basil leaves in an image as measured accuracy of detection by finding the approximate center of each leaf
- Developed an API to find a leaf's center from an image and convert the coordinates to real world points with the goal of autonomously picking and placing leaves on a production line
- Created the robot with a multidisciplinary team of Software and Mechanical Engineers
- Published Thesis Paper: Basil Leaf Automation Conference Presentation: Video

Peer to Peer File Sync App – C

- Built a peer to peer file syncing command line application that synced specific files between a list of peers by using a TCP connection and socket programming concepts in C
- Worked with a team to design, diagram, and implement the project from the ground up
- Improved team communication and debugging skills after many late nights spent on fixing bugs

Autocomplete Text Editor – Python

- Building a basic text editor with autocomplete suggestions
- Using Google n-gram's top 10,000 common words to offer word suggestions as the user types

Eigenvector Graphing Project – Python

- Designed a GUI based python program to visualize a Predator/Prey relationship that dynamically constructed a graph by using eigenvectors and given eigenvalues.