Lucas Walbeck

CONTACT

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PROGRAMMING SKILLS (PROFICIENT)

Java

Python

C#

C/C++ 97 & 11

HTML/CSS

PROGRAMMING SKILLS (FAMILIAR)

Verilog

Swift

JavaScript

Jquery

SQL

DEVELOPMENT ENVIRONMENTS & FRAMEWORKS

Visual Studio

ASP.NET MVC

Xcode

React (Front-end)

Django (Back-end)

REST API

Windows

Linux

BASH

VERSION CONTROL

Github

Team Foundation Services (TFS)

Azure Repos

OBJECTIVE

I am an aspiring software developer with interests in Intelligent Health Applications, UX Design, full-stack development, and mobile-systems design.

EDUCATION

Bachelor of Science in Computer Science, Minor in Finance University of San Diego | May 2020 | Overall GPA 3.8, Major GPA 3.7

SELECTED COURSEWORK

Advanced Algorithms
Computational complexity
(Pending Spring 2020)
Principles of Digital Hardware
MIPS, Verilog single cycle CPU
overview

Object Oriented Programming
Design patterns, polymorphism,
inheritance
Principles of Info Security
Threat modeling, SDL, Attack vector
analysis

Neural Networks
Machine learning,
Algorithm analysis
Networking
OSI Network model,
protocol analysis

EXPERIENCE

Application Developer Intern | Flyers Energy | Auburn, CA | Summers 2018-2019

- Created auditing program to fix faulty credit card records for accounting team
 - Over 350+ records corrected since deployment in June 2019
- Helped implement help desk ticket reporting for company employees
 - Over 200+ employees accounted for in reporting
- Full stack development in ASP.NET for company intranet utilizing jquery and bootstrap for front-end and C# for back-end

VR Curriculum Developer | Hands On Technology | San Diego, CA | Spring 2019

- Created a 5-day curriculum that utilizes WebVR and Oculus Go headsets to engage and educate students in VR with their incoming skillset in mind
- Curriculum has been taught to over 50+ children as of Summer 2019

PROJECTS

Portfolio Applications (Web Application and iOS Application)

- Utilizes Django Rest Framework to provide an API model for portfolio details
- Web app uses React and Axios library to procedurally load data from API
- iOS app uses SwiftUI and REST API calls to modify content

Image Colorization Neural Network (Python)

- Python application utilizing Tensorflow and OpenCV libraries implementing a convolutional neural network
- Trains on color images and colorizes black and white images based on features
- Able to accurately colorize outdoor images based on training set and resources

Music Streaming Server and Client (C++/Java)

- Server written in C++ utilizing POSIX threads to stream bytes to a client through a custom protocol
- Client written in Java using Maven utilizing the protocol and AudioPlayer class to play streamed music

Address Book Application (Python)

- Python application written with encrypted SQL database to store hashed contacts using end-user's encrypted password
- Input validation to prevent SQL injections and input crashing

AWARDS AND RECOGNITIONS

- Captain of Division I Men's Rowing Team | Fall 2018 Present
- President of Association for Computing Machinery (ACM) Chapter at University of San Diego | Fall 2019 — Present
- Summa Cum Laude Graduate | Jesuit High School | May 2016 | Sacramento, CA