

James E. Roberts

jimroberts10@gmail.com

jamesroberts.dev

EXPERIENCE

SOLO PROJECTS

Self Study

Columbus, OH

Apr 2022 – Current

- Built a server / client application for streaming live data from an android phone to a desktop computer on the same network. Made Android app using Kotlin and Android SDK, desktop app with python, data stream uses TCP.
- Worked on a tool for generating workflow scripts, using python with tkinter for GUI development.
- Submitted entry to Metroidvania Month 19 gamejam, ranked 41 overall out of 132 submissions.
- Set up personal website from scratch using React.
- Completed course on Chinese language HSK2 through Jamie's Mandarin.

PROMETRIC

Software Developer

Baltimore, MD

Jan 2019 – Apr 2022

- Worked as part of a team to build a new test center administration system from the ground up, for supporting pop-up test centers across the world.
- Built workflow managing system capable of accepting customizable json workflows using .NET core, which maintained connection with a messaging service using SignalR
- Developed voice-capture software for biometric data acquisition for using Windows Forms in C# .NET
- Created command-line debugger tool to test features in isolation and simplify development
- Designed UI wireframe and mockups for close of business dashboard webpage using Gimp
- Improved on test center front-end ui using React with Antd, Webpack and Typescript
- Reinforced codebase with front end unit tests in jest, and back end unit tests with xunit
- Wrote integration/load testing software using Selenium

EF EDUCATION FIRST

English Teacher

Guangzhou, China

Sep 2017 – Oct 2018

- Led 17 bi-weekly, immersive English education classes with native Chinese speakers ages 3-17
- Wrote lesson plans and developed supplementary teaching material for use in the classroom
- Independently developed and launched game for Android written in native Android Studio, using an event messaging system to separate engine logic from ui elements, to help students practice English

HISTOWIZ, INC

California Sales & Marketing, Business Development

San Jose, CA

Sep 2016 – Jan 2017

- Coordinated business-to-business (B2B) direct sales of histology services to cancer researchers in California
- Directly connected Histowiz with two research labs and one pharmaceutical company for regular use of histology services

PHILIPS HEALTHCARE

CT Physics Intern

Cleveland, OH

Jan 2014 – Dec 2014

- Performed verification and validation (V&V) on novel CT scanners for physics and image quality requirements to meet FDA compliance requirements
- Investigated defects relating to CT calibration physics and recommended changes to code to resolve scanning errors
- Used Matlab to simulate automated calibration routines run on various CT scanners, and suggested improvements to prevent edge-case errors that would have potential to cause serious harm to patients

CWRU DEPARTMENT OF BIOMEDICAL ENGINEERING

Research Assistant

Cleveland, OH

Apr 2012 – Jan 2014

- Used Optical Coherence Tomography (OCT) to aid in cardiovascular research
- Wrote specifications, sourced actuators, machined components and installed an automation system inside an incubator for high-throughput OCT imaging

SKILLS

C#, Python, Kotlin, Java, Javascript, Typescript, Matlab, Simulink, Labview, SQL, HTML, CSS, Git, React, Webpack, Antd, Material UI, NodeJS, d3.js, ASP.NET, SignalR, Selenium, ffmpeg, Unity, OpenGL, WebGL, Shadertoy, Jest, Junit, Xunit, Android SDK, REST,DDD, MVC, Dependency Injection, Events, Workflows, Statistics, Biomedical Imaging, Electrical Engineering

EDUCATION

CASE WESTERN RESERVE UNIVERSITY
Bachelor of Science in Biomedical Engineering
Minor in Physics / Minor in Electrical Engineering

Cleveland, OH
Jan 2010 – May 2015
GPA: 3.0 / 4.0

ADDITIONAL

Alumnus of Alpha Phi Omega
Alumnus of Delta Upsilon fraternity
Won \$1k in funding at GiveBackHack Columbus, 2022
Volunteer engineer at BioCurious for community DIY Fluorescent Microscope, 2016
Volunteer biomedical equipment technician at Medwish, 2015
First place business model for CWRU 2013 Blackstone Launchpad's Startup Weekend
Volunteer engineer for Engineers Without Borders, 2011-2012
Volunteer research assistant at Cleveland Clinic immunotherapy lab, 2011
Chinese – Mandarin – HSK2
Completed Andrew Ng's Machine Learning course on Coursera.
Android solo developer with published app on Android app store, "Wordfall"
Eagle Scout

References available upon request