

# Kevin Bui

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## Relevant Experience

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**Xinetix, Inc. – Embedded Software Engineer Intern** Aug 2021 - Dec 2021

- Implemented Arduino firmware for a test fixture that characterized and validated medical device components used during cataract surgery using a potentiometer and I2C OLED display module
- Facilitated the repair and operational use of two prototype brain diagnostic devices by identifying configuration errors on the Teensy development board that resulted in unpredictable behavior

**CoAction Consulting, LLC – Embedded Software Engineer Intern** Jun 2021 - Jul 2021

- Developed firmware for a bioreagent transportation product to send data from an SPI interfaced thermocouple to a mobile app by Bluetooth Low Energy with an ARM Cortex-M embedded board in C
- Trained test engineers and provided documentation to use embedded platform for thermocouple product research

**Equinox Ophthalmic, Inc. – Manufacturing Test Engineer** Jun 2018 - Sep 2019

- Planned and executed a 9-month-long manufacturing build plan to support ongoing clinical trials of an ophthalmic treatment device going through the FDA's De Novo process
- Automated data collection for the testing and validation of check valves using a manometer, Arduino, and Python
- Generated Test Instructions and Manufacturing Process Instructions under an ISO 13485 Quality System

**Buivision, Inc. – R&D Engineer Intern** Jul 2017 - Sep 2017

- Accelerated prototype development by a month by displaying a mockup of a user interface for a medical device using C and an FTDI module

## Projects

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**Club Website – Computer Science Club at OCC** May 2022 - Sept 2022

- Built a website to publicize club activities and provide learning resources using HTML, CSS, and Javascript

**Biomedical Engineering Capstone Project – Project Team Lead** Sep 2017 - Jun 2018

- Managed a team of 4 students in designing, manufacturing, and testing a device for breast cancer detection
- Processed signals generated from an ultrasonic transducer to produce images using a Raspberry Pi and Python

**Pulse Oximeter** Sep 2015 - Apr 2016

- Built a prototype pulse oximeter on a team and implemented signal acquisition and digital signal processing algorithms using photodiodes, a SparkFun RedBoard, and MATLAB

## Skills

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**Languages:** (proficient): Python, C/C++, Arduino (familiar): HTML, Javascript, CSS, MATLAB, LabVIEW

**Technologies:** PostgreSQL, Git/GitHub, Docker, Microsoft Excel, VS Code

## Education

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**Orange Coast College**

Associate in Science in Computer Science

Sep 2021 - Jun 2022

**The University of California, Irvine**

Bachelor of Science in Biomedical Engineering: Premedical

Sep 2014 - Dec 2019

## Extracurriculars

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**Morning Sign Out | Editor-in-Chief - Pharmaceutical and Medicine Editorial Team** Oct 2018 - Current

- Reviewed and published articles from a team of 6 writers on the latest medical research each month for a website focused on health literacy for a lay audience

**Tau Beta Pi Association - CA Tau Chapter | Industrial Relations Chair** Feb 2017 - Feb 2018

- Established new professional development program to connect students with research institutes every two months