

# Samuel Andrew Bondoc

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Campus  
Irvine, CA

Home  
Temecula, CA

## EDUCATION

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University of California, Irvine

Entrance: August 2018

**Bachelor of Science in Computer Engineering**

Graduation: June 2021

Courses – **Data Structures and Algorithms** | **Database Management** | **System Software** | **Processor Hardware**  
**Object-Oriented Programming** | **Computer Networks** | **Signal Processing** | **VLSI** | **Machine Vision**

## SKILLS

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Coding – **C** | **C++** | **Python** | **SQL** | **JavaScript** | **Verilog**  
**HTML** | **CSS** | **Java** | **8051** | **MIPS** | **RISC-V**

Interfaces – **Git** | **Windows** | **Linux** | **SSH** | **HTTP** | **TCP**  
**Raspberry Pi** | **Arduino** | **Node.js** | **Koa.js**

Tools – **GitHub** | **Xilinx Vivado** | **Google Apps Script**  
**MySQL** | **SolidWorks** | **GDB** | **Valgrind**

Design – **Paint.NET** | **Canva** | **Adobe Premiere Pro**  
**Adobe After Effects** | **Audacity** | **GIMP**

## EXPERIENCE

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### Engineering Course Tutor

August 2020 – June 2021

UCI Office of Access and Inclusion

- Taught programming paradigms to 4 students. [ **C** | **8051** | **MIPS** | **RISC-V** ]
- Developed memory architecture visualizations for 1 student. [ **Paint.NET** | **C** ]
- Instructed 1 student on circuit analysis techniques.

### Media Coordinator

November 2019 – June 2021

IEEE Student Branch at UC Irvine

- Established online presence for the club, increasing engagement by over 40%.
- Designed graphics for, composed, and edited weekly newsletter. [ **Paint.NET** ]
- Created and published visual content for advertising on 4 social media accounts. [ **Premiere Pro** | **After Effects** ]
- Defined standardized protocols for new file system with API-style documentation.
- Coordinated with 5 other board members to manage communication with over 30 industry tour participants.
- Supervised 2 embedded systems workshops with 25 students each. [ **Arduino** ]

### Cybersecurity Workshop Tech Mentor

May 2021

UCI Office of Access and Inclusion

- Facilitated virtual 3-weekend IoT seminar with over 60 participants from colleges across the U.S.
- Diagnosed DHCP setup anomalies for query-filtering DNS server. [ **Raspberry Pi** | **Linux** ]
- Guided beginner Python users through coding a Caesar cypher. [ **Python** ]

### Summer Program Assistant

April 2019 – September 2019

UCI Office of Access and Inclusion

- Mentored over 80 students for 8 weeks in hardware/software integration. [ **Python** | **SolidWorks** ]
- Formulated JavaScript curriculum for advanced participants. [ **GitHub** | **JavaScript** | **Premiere Pro** ]

## PROJECTS

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### Link Budget Diagnostic Utility

- Collaborated in a team of 3 developers with agile-like project framework for 20 weeks.
- Produced MVC GUI for ground-to-satellite RF analysis tool with Cesium REST API. [ **JavaScript** | **HTML** | **CSS** ]
- Supplied continuous integration/delivery to professional industry lead and oversaw QA throughout SDLC.

### IoT Irrigation System

- Designed irrigation prototype with DHT-11 sensor, HW-416 PIR sensor, and I2R LCD. [ **Raspberry Pi** | **Python** ]
- Optimized distribution efficiency protocol with CIMIS database retrieval using FTP and string parsing.

### Online Submission DBMS

- Administered social media page receiving 20 entries daily reaching 20,000 users with a team of 3 moderators.
- Implemented visual anti-spam filter with regex generation, increasing engagement by 98%. [ **JavaScript** ]
- Deployed spreadsheet organization script, leading to 12.8x publication rate. [ **Google Apps Script** ]