

Brycen Westgarth

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EDUCATION

Master of Science in Electrical and Computer Engineering, University of California, Santa Barbara (UCSB)

June 2022

Specialization: Signal and Image Processing

GPA: 3.89

Bachelor of Science in Computer Engineering, University of California, Santa Barbara (UCSB)

June 2021

Engineering Honors Program

GPA: 3.59

EXPERIENCE

Video Software Engineering Intern at Dolby Laboratories, Remote, CA

June 2022 - September 2022

- Worked to integrate high dynamic range color processing support into Android devices
- Researched color space theory and visual perception concepts for display technologies

Software Engineering Intern at KBR, San Diego, CA

June 2021 - September 2021

- Developed a computer vision algorithm in C++ for real time detection of moving objects within aerial video
- Created a web service for modeling and tracking satellite orbits and determining potential communication time windows with specified points on earth
- Integrated web service software into a larger software project under Navy contract and configured the software to be deployed on a server

Computer Engineering Intern at Aptitude Medical Systems, Goleta, CA

April 2021 - June 2021

- Developed a portable electrochemical blood analysis device prototype for detecting a deadly blood condition called coagulopathy
- Designed a custom PCB for the prototype to integrate the peripheral components and sensors
- Created an embedded touchscreen application for user interactions with the device

Computer Engineering Intern at Zmicro Inc., San Diego, CA

June 2020 - September 2020

- Developed a cross platform bitmap editing application that allows a user to create and flash images to an e-paper display
- Integrated the bitmap editing application with existing an e-paper labeling system for removable server hard drives
- Designed portions of an embedded system inside an aircraft server
- Collaborated with a multidisciplinary team of engineers on various stages of product development

RELEVANT COURSEWORK

Image Processing, Computer Graphics, Computer Vision, Digital Signal Processing, Machine Learning, Software Application Design, Computer Architecture, Embedded Systems Design, Database Systems

TECHNICAL SKILLS

- | | |
|------------|-------------------------------|
| • OpenCV | • Autodesk Eagle |
| • OpenGL | • Tensorflow |
| • GLSL | • Git |
| • Linux OS | • Adobe Photoshop/Illustrator |

PROGRAMMING LANGUAGES

- C/C++, Python, Java, Embedded C, MATLAB