

## Andrew Britten

Post-Military Electrical Technician  
San Diego, CA 92131  
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### EDUCATION

#### B.S. Electrical Engineering (Machine Learning)

Expected Graduation: June 2020

University of California San Diego, La Jolla CA

Full-time student at UCSD with heavy experience in machine learning fundamentals and research. Holds the title of intern with Lerman Labs ultrasound research, founding member of a robotics club Triton-Ai, senior volunteer at Envisions Makerspace

- Experienced in C programming, Python, data analysis, and machine learning algorithms
- Experienced in Matlab analysis and programming with matrix mathematics and signal processing
- Fundamental understandings of digital, analog design and linear, non-linear components as well as Op-Amps
- Performed Arduino, Nvidia Jetson Nano, and Raspberry Pi robotics interfacing with IDE programming.
- Experienced with design programs: Solidworks, Inkscape, Pspice and Eagle Autodesk
- Founder of Triton-Ai robotics club at UCSD for AI framework design and research

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### WORK EXPERIENCE

#### Electrical Engineer Technician II

December 2015 – September 2016

BD Vyaire Medical, Palm Springs CA

Level II technician in the Vyaire Failure-Analysis Laboratory, conducting 400+ investigations on medical devices and determining the root-cause of failure, reporting to the FDA and the Vyaire factory production

- Vyaire certified in field-service and software installation of VELA ventilators
- Strong use with multi-meters, oscilloscopes, stress-testing equipment, and electronic x-rays for PCB fault isolation
- Experienced in regulating low pressure air systems, manifolds and solenoids for ventilator analog to digital control
- Monitored and calibrated PEEP and tidal volume with oxygen analyzers and PFC 3000 tidal readers
- Isolated and replaced sub-components in failing products, refurbishing approximately \$12,000 worth of factory cost
- Documented all root-cause findings with Microsoft Word, Excel, Outlook, SharePoint, and camera/microscope visuals
- Evaluated findings with Vyaire team and management to spot noticeable trends, for production feedback and improvement
- Reported all investigations with standardized forms to the FDA

#### Sonar Technician Submarines E-5

July 2009 – July 2014

United States Navy, Connecticut-Hawaii-Guam

Skilled technician attaining the rank E-5 with 5 years “hands-on” experience of operating, installing, and maintaining highly sensitive electronic equipment and hydraulic systems on board a US Navy nuclear submarine

- Managed the Sonar operating team of 5+ technicians under high stress military intelligence gathering
- Collected ocean/ship vessel sounds, identifying the signal with signature frequencies, motion analysis, and aural recognition
- Operated a variety of Fourier Transform signal-software as spectrum analyzers in decibels, frequency, path, and time
- Responsible for the restriction of confidential data, with zero discrepancies in official military audits and logbooks <sup>1</sup>
- Performed operational testing and routine services on Lockheed Martin military Sonar hardware and software
- Conducted 1000+ safety work controls for multi-server/computer systems, high voltage circuitry, and Sonar transducer arrays
- Supervised several corrective maintenances on a multi-million-dollar Towed Array system, vital for national security <sup>2</sup>
- Heavily experienced with verbal and written instructions, Standard Operating Procedures, and constructive feedback

<sup>1</sup>\*Received Navy Good Conduct Medal for an above average performance with limited supervision\*

<sup>2</sup>\*Was awarded an Admiral Citation for emergent repairs of this vital hydraulic system on the submarine\*

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### SKILLS

Maintenance, Troubleshooting, Process Improvement, Signal Flow, Measuring Instruments, Technical Schematics, Programming, Matlab, Python, AI, Frameworks, Circuit analysis, Auditing, Inventory Management, Safety Work Controls, Procedural Compliance, Training, Security Clearance, Priority Decision Making, Strong Work Ethics, Adaptable, Reliable