

James Albert

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Education

University of California, San Diego

Bachelor of Science in Electrical Engineering | Graduation: June 2020

- Major: Power Engineering
- Relevant Coursework: Power Systems Analysis, Energy Conversion, Power Electronics, Motor Drives, Real World Power Grid Operation, Power Grid Modernization, Power Grid Resiliency, Power Distribution System

University of California, Berkeley

Electrical Engineering and Computer Science | Transferred: January 2018

- Relevant Coursework: The Structure & Interpretation of Computer Programs, Data Structures, Machine Structures

Skills

- **Software and programming:** C++, C, python, Java, MATLAB, Verilog, ARM Assembly, RISC-V, x86, PSIM, Cadence Pspice, Excel VBA, PLCs, SCADA, AWS, Azure
- **Prototyping:** 3D printing, electronics systems, Engineering Design, Autodesk EAGLE, SolidWorks, Rhino 7, AutoCAD, circuit building and testing
- **Project Management:** Jira, Trello, Clio, monday.com

Project Experience

Underground Cable Ampacity Calculator

- **Technical Problem Solving:** Engineered an application that processes situational data and delivers tailored recommendations. Iteratively tested/troubleshooted/debugged prototypes against requirements/constraints to, optimize for cost-effectiveness and reliability.
- **Database Creation and Management:** Researched various commercially available cable types and their specifications, developing a comprehensive database using Excel VBA for streamlined data analysis and decision-making.

Power Flow Analysis Calculator

- **Application Development Leadership:** Directed a team in developing an application that calculates power/load flow based on data about buses and branches, enhancing analytical capabilities for electrical systems.
- **Methodology Research and Delegation:** Investigated various analytical methods and strategically assigned programming tasks to team members, ensuring efficient and effective development.
- **Quality Assurance and Presentation:** Conducted final proofing of the application and spearheaded the team's presentation, showcasing the application's functionality and impact to stakeholders.

SOLBILITY Emergency Solar Power

- **Project Leadership and Budget Management:** Led a 4-person team in consulting UniSol Advanced Energy Products to develop a budget-friendly portable solar charger for low power AC/DC devices, ensuring cost-effective solutions.
- **Design and Technical Development:** Researched and drafted the design for the power bank, built and programmed an Arduino-based monitoring and Bluetooth communication circuit, and collaborated on a mobile app to interface with the device.
- **Documentation and Team Oversight:** Authored detailed product documentation for online publication, set weekly goals for the team, and managed all reports and presentations to ensure project milestones were met.

UCSD's ECE 5 Robotics Competition

- **Competition Success:** Contributed as a key team member to developing an optical feedback tracking robot, securing 1st and 3rd place.
- **Component Design and Fabrication:** Modeled and 3D printed all chassis and mounting components, ensuring precision and functionality in the vehicle's design in AutoCAD and EAGLE.
- **Iterative Development Oversight:** Supervised the construction of each sensor circuit and chassis iteration, driving continuous improvement and optimization throughout the project.

Leadership

Officer Candidate | U.S. Air Force

Maxwell AFB | November 2016 – November 2019

- **ROTC Cadet at UC Berkeley and San Diego State University:** Led weekly physical training sessions, ensuring high levels of performance and accountability among all members.
- **Leadership Development:** Designed and implemented impactful leadership training activities, significantly enhancing cadet skills and team cohesion.
- **Fundraising and Recruitment:** Organized 20 successful fundraisers and recruitment events, boosting program visibility and engagement.
- **Event Coordination:** Planned and executed social events for over 50 students, fostering community and camaraderie within the ROTC program.

All Experiences

Senior Legal Assistant | The Cardoza Law Corporation

Remote | February 2020 – Present

- **Software Development:** Designed and developed custom software solutions to enhance organizational efficiency and throughput, leveraging existing applications for optimal performance.
- **Process Analysis and Optimization:** Conducted meticulous reviews and crafted comprehensive written summaries of personal statements, legal documents, and relevant policies. Drafted various legal documents using all found information to support lead attorneys.
- **Client-Attorney Liaison:** Acted as a key intermediary, facilitating clear and effective communication between clients and attorneys remotely.

Electrical Power Production - E3 | U.S. Air Force

Travis AFB | November 2016 – January 2020

- **Electrical Infrastructure Installation and Maintenance:** Installed and maintained electrical systems for buildings and street components, ensuring operational reliability and safety.
- **Compliance and Reporting:** Adhered to federal electrical codes and prepared detailed bills of materials for task completion, ensuring all projects meet industry standards. (i.e. IEEE, AFI 32-1064)
- **Documentation and Record-Keeping:** Thoroughly recorded all work performed and inspections conducted, maintaining accurate and organized records for future reference.

Professional Organizer | Self-Employed

San Diego | January 2022 – Present

- **Client-Focused Organization Services:** Assist clients in organizing and decluttering their homes, offices, and other spaces, creating functional and aesthetically pleasing environments.
- **Personalized Improvement Coaching:** Guide clients in identifying areas for improvement in their lives through organization, and teach strategies to balance practicality with idealism.