

Clayton Lewis Abel

EDUCATION

Abilene Christian University, Bachelor of Science in Engineering
University of Texas, Full Stack Developer

Graduated May 2018
Graduated March 2022

SUMMARY OF TECHNICAL SKILLS

- **Programming Languages:** JavaScript, HTML, CSS, Python, Verilog, System Verilog, VHDL, Perl, TCL, 68HC11 assembly language
 - **Programs and tools:** NodeJS, Express, SQL, ReactJS MongoDB, Silos, Modelsim, Libero, Spice, TurboCAD, Excel, Teams, CAD, LabVIEW, Multisim, Design Spark, and many different measurement devices
 - **Training:** Object Oriented Programming, Object-Relational Mapping, MVC structuring, VLSI Verification, UVM Methodology, Trained in ISO 9100, FOD, ESD, Counterfeit part prevention
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EXPERIENCE

University of Texas, Austin, TX - Coding Boot Camp - Full Stack Developer Certification, December 2021 - March 2022 (4 months)

- Expanded my skill set and proficiently implemented the following languages and programs -HTML, JavaScript, CSS, NodeJS, Express, MySQL, ReactJS, MongoDB, Robo 3T, Visual Studio Code, Insomnia, Web API's, Markdown, Github, Heroku, JawsDB
- Developed a dynamic online portfolio using JavaScript, HTML and CSS to display the different projects I created using the languages and programs listed above to display my mastery of these skills
- Virtually collaborated and coordinated with teams to create, develop, and deploy several web application successfully using Github

Tekmos, Austin, TX - Design and Verification Engineer, September 2018 - June 2021 (2+ years)

- Served as lead engineer and customer liaison on several major client projects, e.g. Collins Aerospace, Honeywell, and BAE
- Created detailed Verilog test benches for design verification based on customers data sheets
- Performed failure analysis on a chip with an unintentional SCR
- Assisted head project Engineers in RTL design and synthesis of microchips
- Quickly learned new programming languages based on customers' desired final language type, e.g. VHDL for Honeywell
- Reverse engineered designs based on the customers datasheet
- Designed PCB's for long-term and high-temp reliability studies
- Created microchip bonding diagrams
- Created data sheets for each project
- Collaborated with the head of the Quality Department to streamline the design process
- Coordinated with Test Engineers to create reliability tests
- Worked with the Resource Procurement Department to create a custom high temperature ceramic package for a flash design
- Debugged product testing failures and coordinated with third-party manufacturing companies
- Hosted a high-temperature semiconductor exhibit with the Tekmos President at the 2019 IMAPS Hi-TEN conference in Oxford, UK

Tekmos, Austin, TX – Electrical Technician, July 2011 - September 2018 (7+ years)

- Tested products to ensure proper functionality
- Interpreted electronic schematics and mechanical layouts to diagnose equipment problems
- Designed code using C and Python to create remote thermometers installed in ovens
- Designed component housing using CAD
- Assisted with product inventory
- Assisted lead Design Engineers with multiple projects
- Verified microchip reliability based on datasheet specs
- Used logic analyzer to reverse engineer read, program, and verify sequences for a NXP microchip
- Designed circuit boards using Design Spark
- Simulated designs using LabVIEW and System Verilog

Abilene Christian University, Abilene TX – Senior Engineering Capstone Project, 2017 - 2018

- Researched, developed, and presented a specialized drone to assess and measure powerline utilities for Milsoft Utility Solutions
- Selected product components, created a Bill of Materials, and made a budget for component and design expenses
- Coordinated with a 6-member team to develop and test the power line drone, as well as accommodate client product specifications, performance, and quality need