

ZACHARIE PERKINS

2812 Perkins Lane ~ Redondo Beach, CA 90278 ~ 310.341.6449 ~ zac@motorsportselectronics.com ~ www.zacperkins.com

Highly versatile business minded leader dedicated to building and scaling high-tech automotive companies. Utilizing the diverse background and knowledge in automotive startups to partner with industry visionaries to rapidly and efficiently create products of the future. Motivated to build teams that correlate data to collaborate on finding successful solutions.

CORE QUALIFICATIONS

- | | | |
|----------------------------------|---------------------------------|-----------------------------|
| • Business Development | • Data Acquisition Systems | • High Voltage Architecture |
| • Engineering Management | • Engine Management Systems | • Precision TIG Welding |
| • System and Product Engineering | • Harness Design & Construction | • Mill and Lathe Machining |
-

PROFESSIONAL EXPERIENCE

Sr. Manager EE Architecture/Functional Integration/Vehicle Shop- Canoo, Torrance, CA [2018 thru Present]

- Directly report to the CTO.
- Lead electrical architecture team responsible for electrical system design across multiple programs.
- Lead functional integration team responsible for testing written requirements for validation and accuracy.
- Lead vehicle shop team responsible for engineering support, vehicle test prep, maintenance, and service.
- Program Lead for Pre-Gamma/Testlander Plan, Design, and Build.
- Lead electrical systems and architecture for multi-purpose delivery vehicle program.
- Electrical systems and architecture for lifestyle vehicle program with 32 Beta's and zero reworks.
- Electrical systems and architecture for special projects and prototype vehicle programs.
- Bring-up on assembly line for Beta and Gamma production at Roush.
- Shake down testing of Beta and Gamma Vehicles.
- Bring-up and testing of first harness articles on lab car.
- Lead electrical systems and architecture for alpha prototype vehicle program.
- Sourced supplies, parts, tools and manufactured all harnesses for alpha prototype vehicles.
- Harness DRE for motor and inverter.
- Sourced supplies, parts, tools and manufactured all harnesses for Beta motors and inverters.
- Conceptualized/Designed HV battery management architecture.
- Developed and maintained the entire electrical library using Capital Library.
- Customized frontend of Capital Devices and responsible for server maintenance of Capital Suite.
- Active member in Release Council, Program Steering Team, Program Deliverables and Timing.
- Active member of interviews and interview processes for new hires.
- Test Driver for Beta Engineering Fleet Vehicles.
- Review program and technical requirements from Polarion and actively test on vehicles.
- Assign issues in JIRA and working directly with device DRE's.
- Review and maintain device transmittals and change requests.
- Work closely with harness manufacture to ensure accuracy and compliance.

CEO/Co-Founder- Motorsports Electronics, Palos Verdes Estates, CA

[2015 thru Present]

- Develop relations with top level vendors to express needs, develop products, and negotiate pricing.
- Developed and sustain company website, SEO, e-commerce, blog, and forum.
- Developed and implemented efficient spreadsheets by utilizing macros to increase accuracy and reduce wiring harness pin allocation and schematic documentation design time.
- Developed and sustain database of connector drawings to reduce layout design time and ensure quality.
- Accountable for cost control, budgeting, general accounting, payroll, and full profit and loss reports.
- Implemented a live task list to monitor and accurately update current daily assignments.
- Accountable for tracking and maintaining inventory of supplies, modules, sensors, parts, and tools.
- Accountable for designing and utilizing quotes, S.O.'s, P.O.'s, invoices, and project reports.
- Vehicle integration of AEM, Cosworth, Link Engine Management, MoTeC, Pectel, RaceGrade, Vi-PEC, and Bosch electronic components, engine management, displays, ABS, and data acquisition systems.
- Design wiring harnesses for a variety of custom and motorsport vehicles, providing documentation of current limits, I/O lists, pin-outs, layouts, schematics, and supplies.
- Hand fabricate motorsport wiring harnesses utilizing industry standardized equipment and supplies.
- Accountable for performing QC and system testing for every system built in house.
- Provide CAN communication between modules, sensor calibration, function tests, and diagnostics.
- Data Engineer for VSA Motorsports' Lotus Evora GT4 for Pirelli World Challenge.
- Key partner for The Sindy Club, King of the Mountain 2019, 2020, 2022, and 2023 PPIHC with Robin Shute.

Special Projects/Motorsport- Faraday Future, Gardena, CA

[2016 thru 2017]

- Lead support for the electrical system on the FF91 Pikes Peak 2017 team.
- Accountable for cost control, budgeting, and design of low voltage wiring architecture specific to our Aston Martin (AML) and Pikes Peak program.
- Assisted in the design of high voltage wiring architecture on our AML program.
- Designed, developed, and managed 4G Bonded IT infrastructure to support over sixty devices for easy setup to suit Dragon Racing's Formula E team, while traveling to over nine countries.
- Managed Dragon Racing's SBG software, responsible for live modeling and tracking of driver performance and pit stop analysis with fully synchronized post session review of timing, track state, video, and radio.
- Developed relations with top level vendors to express needs, develop products, and negotiate pricing.
- Developed a database of connector drawings and datasheets for our AML program.
- Developed detailed device and connector tracking lists, device specification database, loom drawings, schematics, and BOM specific to the AML program.
- Accountable for initial sourcing and maintaining low voltage inventory of supplies, modules, sensors, parts, and tools specific to special projects.
- Vehicle integration of Cosworth, MoTeC, Texense, Bosch, and McLaren electronic components, displays, ABS, and data acquisition systems.
- Hand fabricated motorsport wiring harnesses utilizing industry standardized equipment and supplies.

Design Engineer- Apex Speed Technology, Gardena, CA

[2013 thru 2015]

- Vehicle integration of AEM, Cosworth, Link Engine Management, MoTeC, Pectel, RaceGrade, Vi-PEC, and Bosch electronic components, engine management, displays, ABS, and data acquisition systems.
- Designed wiring harnesses for BMW, Porsche, Lamborghini, Subaru, Lotus, and other motorsports vehicles, providing documentation of current limits, I/O lists, pin-outs, layouts, schematics, and supplies.
- Hand fabricated motorsports/harsh environment wiring harnesses utilizing industry standardized equipment and supplies.
- Accountable for updating quotes, S.O.'s, P.O.'s, invoices, inventory, and project reports.
- Accountable for performing QC and system testing for every system built in house.
- Accountable for GB Autosport's 911 GT America electronics program driven by Damien Faulkner.

Manager of R&D and Manufacturing- Covert Tuning, Lewis Center, OH

[2012 thru 2013]

- Developed twin turbo systems for the Lamborghini LP-670 SV and the LP-560, including the first set of known long tube turbo manifolds.
- Developed cylinder sleeves and head studs for the Lamborghini LP-560.
- Developed an organizational inventory system for tracking all supplies, consumables, parts, and tools.
- Developed and implemented efficient R&D techniques and procedures to increase production, save time and ensure accuracy.
- Developed and implemented an organizational task system to monitor and accurately update daily tasks.
- Developed and implemented all product jigs to ensure consistency and quality.
- Accountable for all developmental stage fabrication and TIG welding.
- Accountable for custom wiring and diagnostic troubleshooting.
- Accountable for administration and support of R&D staff, including training, performance, and project development.

Supervisor of R&D and Manufacturing- IPS Motorsports, Lewis Center, OH

[2011 thru 2012]

- Developed forced induction systems, surge protection oil systems, fuel systems, exhaust systems, cooling systems and various performance based products.
- Developed an organizational inventory system for tracking all supplies, consumables, parts, and tools.
- Developed and implemented efficient R&D techniques and procedures to increase production, save time and ensure accuracy.
- Developed and implemented all product jigs to ensure consistency and quality.
- Developed and implemented an organizational task system to monitor and accurately update daily tasks.
- Accountable for all precision TIG welding on high-end projects.
- Accountable for all developmental stage fabrication.
- Accountable for administration and support of R&D staff, including training, performance, and project development.