

ZACHARIE PERKINS

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Highly versatile business minded engineer 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
 - Engineering Management
 - System and Product Engineering
 - Data Acquisition Systems
 - Engine Management Systems
 - Harness Design & Construction
 - High Voltage Architecture
 - Precision TIG Welding
 - Mill and Lathe Machining
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PROFESSIONAL EXPERIENCE

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 an extensive database of connector drawings to reduce layout design time and ensure quality documentation.
- Developed and sustain an organized production schedule to track and maintain accurate deadlines.
- 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/harsh environment wiring harnesses utilizing industry standardized equipment and supplies.
- Accountable for performing QC and system testing for every system built in house.
- Accountable for installation and setup of electronic systems, including CAN communication between modules, sensor calibration, function tests, and diagnostics.
- Data Engineer for VSA Motorsports' Lotus Evora GT4 for Pirelli World Challenge.

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 modelling and tracking of driver performance and pit stop analysis with fully synchronized post session review of timing, track state, video, and radio.
- Co-developed proprietary pit stop timing system to take advantage of driver release after car swap.
- Developed relations with top level vendors to express needs, develop products, and negotiate pricing.
- Developed and implemented efficient spreadsheets by utilizing macros to increase accuracy and reduce wiring harness pin allocation and schematic documentation design time.
- 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/harsh environment wiring harnesses utilizing industry standardized equipment and supplies.
- Accountable for performing QC and system testing for all LV systems specific to special projects.

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.

Fabricator/Performance Technician- IPS Motorsports, Lewis Center, OH

[2011 thru 2012]

- Increased production of custom fabricated parts utilizing efficient design and production techniques.
- Responsible for engine builds, and performance modifications on a variety of performance vehicles ranging from 3000GTs and twin turbo Camaros to twin turbo Corvettes and Lamborghinis.
- Hand fabricated over twenty-five twin turbo systems for fifth-generation 6.2L Camaros.
- Accountable for custom wiring and diagnostic troubleshooting.

Fabricator/ Performance Technician- Performance Theory Motors, Columbus, OH

[2010 thru 2011]

- Increased production of custom fabricated parts utilizing efficient design and production techniques.
- Responsible for engine builds, and performance modifications on a variety of performance vehicles ranging from supercharged 370Zs and turbocharged S2000's to twin turbo Vipers and Lamborghinis.
- Accountable for custom wiring and diagnostic troubleshooting.
- Accountable for general service and repair.

COMPUTER SKILLS

SolidWorks | Altium | VeSys | Office | QuickBooks | MI Tune | MI Build | i2 | PDM Manager
Display Creator | ECU Manager | Pi Caltool | Pi Toolset | Pi Toolbox | Infinity Tuner | PC Link G4+
Google Apps for Work | SEO | Photoshop | Illustrator | HTML5 | CSS | C/C++