



Mozart Faizi, PE, ATD

Principal - Professional Electrical Engineer

Professional Engineer registered in California, Arizona, Washington, Oregon and Nevada with more than 25 years of experience in engineering and project management in industrial, institutional, advanced technology, and commercial projects. develops division standards, master specifications and QA/QC programs. He instructs in-house fundamental engineering and design coursework for junior engineers and designers. Mr. Faizi also is responsible for budgets, schedules, manpower loading, proposals, designs, and engineering providing engineering and design technical as well as project management expertise, QA/QC, review, and approval of electrical documents for construction.

Mr. Faizi is specialized in critical facility type projects. His primary focus remains solidly in the high risk, high exposure, technology dependent mission critical and essential systems projects requiring extensive, intensive facility and infrastructure expertise. Projects are engaged to encompass all aspects from the initial programming stages to and through the post- startup commissioning processes. The tasks inclusive run the gamut from initial conceptual studies and document development through engineering and design document preparation and on to the construction administration and oversight services.

Manages division performing short circuit and device coordination studies, arc flash hazard analysis, engineering cost analysis, Code compliance reviews, and detailed cross-discipline engineering and design coordination of electrical and mechanical systems for power, lighting, low voltage controls, and hazardous/highly toxic materials dispensing and use. Mr. Faizi has extensive specialized experience in the mission critical industries at all levels, with special emphasis in public and private Internet Data Centers and computing facilities, semiconductor manufacturing, hazardous facility type projects (GMP, Oil), and large campus infrastructure projects. In the rare occasion that expert witness services are required. Provides specialized electrical systems forensic analysis including due diligence investigations, depositions, and courtroom testimony. Experience and specializing in project/ office management, operations, client relations, customer service, customer development, marketing/ business development, engineering, interior and exterior lighting and controls design, low voltage/SCS engineering, AV design, security systems, fire alarm design, LEED certification/ analysis, MEP commissioning and energy assessments. industrial facilities. Specializes in low, medium and high voltage system design, substation, Data Center and associated distribution. Perform service entrance sizing and specification. Examine multiple design options for primary and secondary metered service voltage to customer. Electrical design engineering and calculations of power cable, lighting, and grounding system. Skilled in performing circuit breaker coordination studies and short circuit analysis using SKM PTW (windows version of DAPPER and CAPTOR) programs. Special emphasis in high technology industries such as semiconductor facilities, research and development laboratories, data centers/computer, health care facilities and pilot plant operations.

Education

B.S., Electrical Engineering, Arizona State University

Registrations and Certifications

LEED Certified (Electrical): California

Professional Engineer (Electrical) Registered in California, Arizona, Washington, Oregon and Nevada



Relevant Experience

Principal – TK1SC

MEP Engineering Firm

Orange County/San Jose, CA

Principal for day operations at San Jose branch for business development/marketing/sales and client communication/relations. Created new clients for firm consisting of architects, design-build contractors, project management companies, developers, GC's, reps, distributors and manufactures.

Attended OAC meetings, conference calls, coordination meetings, programming meetings, site walks, punch walks, permit submittals, proposals and finances negotiations, hourly billing/project health management, project/deadline management, QA/QC processes and employee scheduling for branch. Handled employee coaching/review process, new employee interviewing/hiring processes, training and continued education for team. (Role: Principal. YR: 2016-2018)

Commercial Office – Campus

Microsoft – Mountain View, CA

This five-building technology consolidation campus project included 205 R&D labs. Design services included 10 MVA, primary metered 12 KV, 15,000 SF onsite data center and N+1 redundancy emergency power requirement and computer rooms. Prepared detailed design document packages of engineered drawings and specifications for procurement and construction Performed system analysis, value engineering assessments and energy compliance electrical analysis, including all electrical engineering calculations. Design and implementation of a high-voltage substation. 1,355,000 SF total. (Role: Electrical Engineer)

Corporate Tenant Improvement

Episil – Tai Nan, Taiwan

Design of 161 KV GIS, transmission substation with multiple 22.8 KV supporting substations for a large facility. Design included N+1 redundancy emergency power requirements. Prepared detailed design document packages of engineered drawings and specifications for procurement and construction. Performed system analysis and the electrical engineering calculations. 2,237,000 SF (Role: Lead Project Manager/Engineer)

Corporate High Rise

Adobe High Rise Towers – San Jose, CA

This 2,380,000 SF project was for the design of the redundant primary high-voltage multi-substation systems within the three high-rise towers. Designed a complex grounding grid that penetrated the mat slab foundation and entered the water table under each of the towers. Design of electrical systems in each tower, which included an emergency generator system, lighting and all specialized facilities power requirements. (Role: Engineer 2019-2020)

Manufacturing and Assembly

Lucid Motors – High Bay – Newark, CA

This project included the renovation and design for High Bay labs, R&D Battery Lab and Machine Shop with-in existing building. These labs serve as R&D research for Lucid Motors and their upcoming vehicle release. Specialized in the Electrical engineering and project management in a design building scenario. (Role: Electrical Engineer, YR: 2020)



Data Center

Colo.com – Arizona

75,000 SF onsite data center and N+1 redundancy emergency power requirement and computer rooms. Prepared detailed design document packages of engineered drawings and specifications for procurement and construction. Performed system analysis, value engineering assessments and energy compliance electrical analysis, including all electrical engineering calculations.

Western Digital – Fremont, CA

Western Digital TI nearly 90,000 SF facility in Fremont, CA. The project consisted of server room and Data Center consolidation. After working with Client to determine room requirements based on operational needs, we provided space plan the Information Technology equipment layout and coordinated power/cooling layouts with the team. (Role: Lead Project Manager/Electrical Engineer, YR: 2015)

Semiconductor

Hitachi – San Jose, CA

Multiple projects consisting of high pressure CDA and PV Systems to be replaced. We provided mechanical engineering services for the design of new high pressure clean dry air (HPCDA) and Process Vacuum (PV) systems. The new Yerba Buena facility consisted of retrofit and tool installation for a 45,000 SF research and development building. Project included installation design for about 800 tools MEP connections and support infrastructure.

CDR Server Development Relocation consisted of Bay Engineers to develop the Conceptual Design Report to relocate labs (30,000 SF) and manufacturing space (10,000 SF) from Building 28 to Building 50. Scope of services included process piping and mechanical. We provided engineering services for test cell clean room rebuilt and Micro Mill Tool Installation including materials lab tool installation,

Fab Consolidation Project consisted of tank farm revisions, Strip-out & Clean-up of Building 015, Design of the ION MILL #13 Tool Installation, Fab 02, Rev 2 Tools Installation: Complete design to facilitate the relocation/consolidation of the buildings and equipment/tools to be relocated from existing location in Building into the existing single area. The tool hookup design was developed in close coordination with Hitachi Facilities Engineering and Hitachi Fab Manufacturing to ensure proper, safe, timely and cost effective installation. (Role: Electrical Engineer, YR: 2010)

Health Care

Good Samaritan Hospital, San Jose

This project included Rad/Fluoro Replacement: mechanical, electrical, plumbing design which included HVAC and Piping Design, electrical design, responding to any OSHPD comments. Prepared construction documents for Surgical Wing Addition: Feasibility study to demolish an existing wing of the hospital and replace it with a new surgical wing addition. Maintained as-needed General Facilities Consulting Contract. (Role: Electrical Engineer)

Industrial / Manufacturing

Alza Corporation – Mountain View, CA

Provided design for renovation of a GMP chemical-dispensing building. This included the development of air flow



diagrams for existing laboratories and the HVAC equipment; analyze and resolve GMP lab pressurization concerns. The Design solutions for laboratory hood exhaust systems for multiple buildings to resolve hood face velocity concerns as well as the design conversion of Building chiller plant to primary/secondary pumping to resolve temperature stability within the building which houses multiple GMP labs.

Provided as-built and tenant improvement designs for multiple buildings including mechanical and electrical systems for various labs and office remodels. Created engineering consulting and evaluations for Coater Process Installation design package, Thermal Oxidizer Installation design package, Acetone Waste Collection System design package. Provided Mechanical Equipment Schedules and included Equipment Schedules for Air Handling Units, Chillers, Boilers, Pumps, Exhaust Fans, Steam Boilers, Filter housings.

Engineered critical assessment package for Buildings and provided Upgraded existing dispense rooms to meet EU cGMP standards. Provided all Motor Control Center Upgrade, electrical upgrade of the electrical capacity of the existing Motor Control Center. (Role: MEP Engineer)

Clean Room

Novellus – San Jose, CA

Design of a 100,000 SF clean room facility with 12 labs used for training purposes. Designed 90,000 SF Class 1 clean room facility including tool fit-up and tool hook-up. Design of power distribution system. Electrical design engineering and calculations of power cable, lighting and grounding system. Provided California Title 24 Energy Code study. 190,000 SF (Role: Electrical Engineer)