

# Muhammad Hassan Shahid

## Electrical Engineer

✉ muhammadhassanshahid2@gmail.com ☎ +966 59 073 2996

📍 Riyadh, Saudi Arabia 📄 Transferable Iqama



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### PROFILE

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Experienced Electrical Engineer with over 5 years of experience, including 3 years as a BIM Electrical Engineer at Saudi Arabian Baytur Construction Co. and Nexera Design Group. Solid grounding in electrical installation and site supervision developed during one and a half years at Habib Construction Services, complemented by early technical exposure as an intern at the National Institute of Electronics (NIE). Proficient in Revit MEP, Navisworks, and other BIM tools, with strong capabilities in electrical system modeling, MEP coordination, clash detection, and producing LOD-compliant BIM deliverables. Known for a detail-focused approach, strong interdisciplinary collaboration, and commitment to delivering accurate, standards-aligned electrical designs across all project phases.

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### CORE COMPETENCIES

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- Building Information Modeling (BIM) Execution
- MEP Coordination and Clash Detection
- Shop Drawings and As-Built Documentation
- Electrical Systems Design & Coordination
- 3D Modeling & Visualization
- Knowledge of Electrical Codes & Standards (e.g., NEC, IEC)

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### PROFESSIONAL EXPERIENCE

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01/2024 – 05/2025  
Riyadh, Saudi Arabia

#### Electrical BIM Engineer

*MISK School | Saudi Arabian Baytur*

- Led development of 3D Revit models for power, lighting, fire alarm, and low-current systems.
- Collaborated with architectural, structural, and MEP teams to resolve over 200 clashes using Navisworks, ensuring smooth installations and reducing rework.
- Coordinated models with integrated load analysis, equipment sizing, and smart system requirements.
- Supported BIM progress tracking by linking model elements to project schedules for visual monitoring of electrical installations.
- Delivered complete as-built BIM models with site updates, equipment tagging.

06/2023 – 05/2025

### **Electrical BIM Engineer**

*Nexera Design Group (USA Based Company)*

- Electrical shop drawings for high-rise residential and commercial buildings in the USA.
- Conduits Overhead and In-Slab, Modeling and Detailing
- Electrical Equipment and Closet Modeling with Detailing.
- Conducted Lighting and Device Layouts.
- Proficient in Conduit Prefabrication.
- Led Coordination and Clash Detection efforts utilizing Navisworks.
- Developed high-quality LOD 300 Models for construction and fabrication.
- Created detailed Prefabrication Spool Drawings.
- Revit Family Creation for customized content and parametric components.

09/2020 – 03/2022

### **Electrical Engineer Trainee**

*Habib Construction Services*

- Assisted in the execution and supervision of electrical systems installation including lighting, power, fire alarm, and earthing systems across residential and commercial projects.
- Reviewed shop drawings and ensured installation complied with design specifications, electrical standards (e.g., NEC/IEC), and site conditions.
- Coordinated with civil and mechanical teams to resolve on-site clashes and optimize MEP routing.
- Conducted inspections and prepared site reports, punch lists, and daily progress updates for project engineers.
- Verified cable schedules, single-line diagrams, and load distribution plans under supervision of senior engineers.
- Participated in testing and commissioning of electrical systems ensuring functionality and safety compliance.

02/2020 – 08/2020

### **Internee**

*National Institute of Electronics*

- Designed and developed printed circuit board (PCB) layouts using industry-standard design software (e.g., Altium, OrCAD, Eagle).
- Assisted in schematic capture, component placement, and routing for multi-layer PCBs, ensuring compact and efficient designs.
- Conducted design rule checks (DRC) and signal integrity analysis to minimize errors and optimize circuit performance.
- Collaborated with hardware engineers to translate circuit diagrams into functional PCB prototypes.
- Supported the testing and debugging of fabricated PCBs, identifying and resolving electrical and connectivity issues.
- Prepared technical documentation and bill of materials (BOM) for production handoff and assembly.

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## SKILLS

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### Software & Tools

- Autodesk Revit MEP
- Navisworks Manage
- Bluebeam Revu
- OrCAD
- Proteus
- Microsoft Office (Excel, Project)

### Electrical Engineering Skills

- Lighting & Power Layouts
  - Panel Board Scheduling
  - Cable Tray Routing
  - Load Calculation & Distribution
  - Single-Line Diagrams (SLDs)
  - Earthing & Lightning Protection Systems
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## EDUCATION

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### Bachelors in Electrical & Electronics

*Federal Urdu University of Arts, Sciences and Technology (FUUAST)*

CGPA: 3.17

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## LANGUAGES

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**English** — Proficient

ILETS: 6.5 Bands

**Punjabi** — Fluent

**Urdu** — Native/Bilingual

**Arabic** — Conversational

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## PROJECTS

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### MISK School Project

*(3026 Mohammed Bin Salman, Nonprofit City, Riyadh 12587)*

- Prepared and updated shop drawings
- Conduit Modeling
- Clash detection with Navisworks
- Family Creation

### KCM3 Meta Data Center

*(Kansas City, Missouri 64165, USA)*

- Family creation
- Low power cable tray
- Detail shop drawings
- Coordination and Clash Devection with other Trades

### 499 Summit Ave Tower

*(54 Floor) (499Summit Ave ferary City, Nj 07.306, United States)*

- Modeled Electrical Equipment
- Making Shop Drawings
- Modeling up to LOD-400
- Collaboration with other disciplines.

**The Standard at LA**

*(3900 South Figueroa Street, Los Angeles, CA 90037)*

- Modeled Electrical Equipment
- Underground & Overhead Conduits
- Clash detection with the help of BIM tracking
- Making Shop Drawings Families Creation

**Robert Frost**

*(6419 85th Avenue, New Carrollton, MD 20784)*

- Device Modeling
- Overhead Modeling and Detailing
- Family Creation

**Margaret Brent**

*(2125 Mountain View Rd, Stafford, VA 22556, United States)*

- Conducted lighting and device layout
- Device modeling
- Family creation

Dated: 08/05/2025

## TO WHOM IT MAY CONCERN

This is to certify that **Mr. Muhammad Hassan Shahid** was employed by **Saudi Arabian Baytur Construction Company (SAB)** as an **Electrical BIM Engineer** from **Jan 2024 to May 2025**.

During his tenure, **Mr. Muhammad Hassan Shahid** was assigned to the prestigious **MISK Schools Project**. His key duties included:

- Creating and maintaining BIM models for electrical systems (lighting, power, fire alarm, low current).
- Preparing LOD-compliant models, electrical shop drawings, and detailed layouts.
- Supporting the project team with model updates through various project stages (design, construction, and as-built).
- Ensuring compliance with project standards, specifications, and client requirements.

Throughout his assignment, **Mr. Muhammad Hassan Shahid** displayed strong technical skills, keen attention to detail, and a commitment to quality and project success. His efforts greatly contributed to maintaining high construction standards on the MISK Schools Project.

We wish **Mr. Muhammad Hassan Shahid** continued success in his future professional endeavors.

Best Regards,

Project Manager



**Dated:12/08/2023**

**TO WHOM IT MAY CONCERN**

This is to certify that **Mr. Muhammad Hassan Shahid**, was employed as a full-time **Electrical BIM Engineer** at **Nexera Design Group** from **03/18/2022 to 12/01/2023**.

We appreciate Mr. Hassan's commitment and valuable contributions to the organization and wish him continued success in his future endeavors.

*Sincerely,*

***EZekic***

**EMIR ZEKIC**

Managing Partner

S. No. 001232

25724

قومی زبان میں تعلیم



قومی ترقی کا ذریعہ

# وفاقی اردو یونیورسٹی

برائے فنون، سائنس اور ٹیکنالوجی

## Federal Urdu University of Arts, Sciences and Technology

### FACULTY OF ENGINEERING

B.Sc. Electrical Engineering (Electronics)

### کلیہ انجینئرنگ

بی۔ ایس۔ سی۔ الیکٹریکل انجینئرنگ (الیکٹرونکس)

ہر گاہ

Be it known that

Muhammad Hassan Shahid

محمد حسن شاہد

No / D/o

Shahid Hafeez

شاہد حفیظ

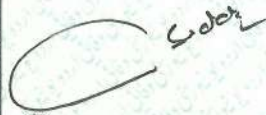
ولد/بنت

has pursued a course of study prescribed by this University for the B.Sc. Electrical Engineering (Electronics) in the Faculty of Engineering and has passed the requisite examination of 2023 held in 2023 having been placed in B class/grade.

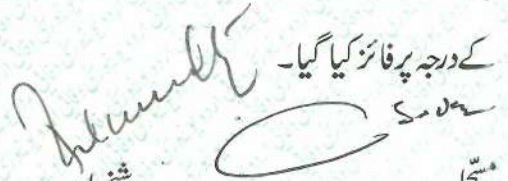
It is hereby certified that he/she has been duly admitted to the degree of B.Sc. Electrical Engineering (Electronics) in this University.

نے کلیہ انجینئرنگ کے تحت بی۔ ایس۔ سی۔ الیکٹریکل انجینئرنگ (الیکٹرونکس) کی سند کے لئے اس جامعہ کے منظور شدہ نصاب کی تکمیل کر لی ہے اور مطلوبہ امتحان ۲۰۲۳ء منعقدہ ۲۰۲۳ء میں کامیاب ہو کر بی درجہ / گریڈ حاصل کر لیا ہے۔

لہذا تصدیق کی جاتی ہے کہ انہیں اس جامعہ میں بی۔ ایس۔ سی۔ الیکٹریکل انجینئرنگ (الیکٹرونکس) کے درجہ پر فائز کیا گیا۔

  
Registrar

  
Vice Chancellor

  
شیخ الجامعہ

Dated 11-12-2023 PAKISTAN

پاکستان ۱۱-۱۲-۲۰۲۳ تاریخ

Note- Detailed transcripts of examination results have been issued separately

امتحان کے مضامین اور حاصل کردہ نثانات کی تفصیلات علیحدہ علیحدہ جاری کی گئی ہیں۔



Grade Information				
90	100	A+	4	Distinction
85	89	A	3.75	
80	84	A-	3.50	
75	79	B+	3.25	
70	74	B	3.00	
65	69	B-	2.75	
60	64	C	2.50	
55	59	C-	2.25	
50	54	D	2.00	
Below	50	F	----	
<b>Pass Marks = 50 %</b>				
<b>Degree Awarding CGPA = 2.00</b>				
<b>TGP / TCH = CGPA</b>				

Autumn/2019	
CEL-113	Introduction to Programming Lab
EEL-111	Basic Electrical Engineering Lab
EEL-112	Workshop Practice
CET-113	Introduction to Programming
EET-111	Basic Electrical Engineering
HU-114	Functional English
NS-115	Calculus & Analytical Geometry
NS-116	Applied Physics (Electricity and Magnetism)

Spring/2020	
CEL-123	Object Oriented Programming and Data Structure Lab
EEL-121	Electronic Devices and Circuits Lab
EEL-122	Engineering Drawing
CET-123	Object Oriented Programming and Data Structure
EET-121	Electronic Devices and Circuits
HU-125	Communications Skills
IDE-124	Thermodynamics
NS-126	Multivariable Calculus

Autumn/2020	
EEL-212	Digital Logic Design Lab
EEL-213	Electronic Circuit Design Lab
HU-214	Pakistan Studies
HU-215	Islamic Studies
EET-211	Electrical Network Analysis
EET-212	Digital Logic Design
EET-213	Electronic Circuit Design
NS-314	Complex Variables and Transforms

Spring/2021	
EEL-211	Electrical Network Analysis Lab
EEL-222	Electrical Machines Lab
EEL-223	Instrumentation and Measurements Lab
EET-222	Electrical Machines
EET-223	Instrumentation and Measurements
NS-216	Linear Algebra
NS-225	Differential Equations
SS-224	Ethical and Legal Dimensions of Engineering

Autumn/2021	
EEL-221	Microprocessor and Microcontroller Lab
EEL-311	Signals and System Lab
EEL-501	Power Electronics Lab
HU-516	Urdu
EET-221	Microprocessor and Microcontroller
EET-312	Probability Methods In Engineering
EET-501	Power Electronics
MS-313	Engineering Economics and Management
EET-311	Signals and System

Spring/2022	
EET-321	Digital Signal Processing
EET-322	Linear Control Systems
EET-323	Electromagnetic Field Theory
EET-324	Communication Systems
HU-325	Technical Report Writing and Presentation Skills
EEL-321	Digital Signal Processing Lab
EEL-322	Linear Control Systems Lab
EEL-324	Communication Systems Lab

Autumn/2022	
EEL-502	Industrial Electronics Lab
EEL-506	Computer Communication and Networks Lab
EEP-411	Electrical Engineering Project-I
EET-414	Renewable Energy Systems
EET-502	Industrial Electronics
EET-506	Computer Communication and Networks
MS-413	Project Management

Spring/2023	
EEL-503	Digital System Design Lab
EEL505	Wave Propagation and Antenna Lab
EEP-421	Electrical Engineering Project-II
EET-503	Digital System Design
EET505	Wave Propagation and Antenna