Misbah Qureshi
11314 White Oak Avenue, Granada Hills, CA 91344

U.S. Citizen   **(818)-217-6923**   **misbahmqureshi@gmail.com**

www.linkedin.com/in/misbah-m-qureshi/

EDUCATION

California State University, Northridge (CSUN)   **May 2021**
Bachelor of Science in Electrical Engineering, GPA 3.2
- Member: Tau Beta Pi CA-Kappa (Secretary 2020 - 2021), IEEE-HKN Lambda Beta
- Relevant coursework: Analog Circuit Design, Biomedical Instrumentation, Communication Systems, Control Systems, Data Communication Networks Digital Systems, Linear Systems, MOSFETs

WORK EXPERIENCE

CSUN and NASA Jet Propulsion Laboratory Joint Project   **(January 2020 – May 2021)**
Position: Project Engineer for the Inter-Satellite Optical Communicator (ISOC)
- Spearheaded multiple sub-teams and coordinated algorithm development, modeling, and testing in Arduino and MATLAB.
- Planned and organized meetings with other teams to meet deadlines under pressure.
- Drafted and presented weekly progress reports to project manager.
- Minimized error by streamlining data reception and transmittance and by overhauling informational archive for user efficiency.

Granada Hills Charter High School   **(August 2015 – June 2016)**
Position: Library Assistant
- Collected information by pathfinding on JSTOR and EBSCO databases.
- Facilitated the transfer of informational resources to individuals and maximized organizational capacity.
- Systematized and recorded information using Microsoft Excel for readability and tracking product availability.

SKILLS

Software and Programming Languages
- Arduino
- C++
- Java
- KiCad
- MATLAB
- Microsoft Office (Word, Excel, PowerPoint)

- OrCAD Capture
- Python
- Simulink
- Verilog and SystemVerilog

Circuit Design
- Analog and digital oscilloscopes

- Analog communication systems
- BJTs and MOSFETs
- Butterworth filters
- DC/AC power supplies
- Function generators
- Multimeters
- Soldering

PROJECTS

1. Engineering an inter-satellite transceiver for NASA Jet Propulsion Laboratory
   - Developed algorithms and signal filters in Arduino and MATLAB.
   - Designed and assembled transimpedance amplifiers to work in conjunction with photoreceptors.
   - Coordinated sub-teams and trained team members to test algorithms and perform diagnostics for optical laser reception in Low Earth Orbit.
   - Directed conferences and examined monthly progress reports to compile for a culminating technical paper.
2. Design and hardware integration of I/O robotics hardware using programming in NXT and C++
   - Programmed NXT bricks to respond to light and pressure sensor input.
   - Implemented in a test bench with sound and motor outputs.
3. Design of a multistage amplifier schematic using transistors
   - Calculated voltage and current gains to precision by hand.
   - Determined input and output impedances and simulated tests to account for changes in load.