

## OBJECTIVE

To achieve a position in Engineering and Scientific Application that allows me to use my abilities in problem solving and technical knowledge to conquer problems in an active environment and industry.

## EDUCATION

### **University of Nebraska, Lincoln, Nebraska**

*Master's Degree in Electrical Engineering (GPA: 3.70)*

Expected Graduation: August 2012

Major Focus: Electrical Engineering

Highlighted Courses:

Analog Integrated Circuits, Power Systems Control and Operations, Wind Energy, Solar Energy, Quantum Mechanics, Particle Physics

*Bachelor's Degree in Electrical Engineering (GPA: 3.63)*

Graduated: December 18, 2010

Major Focus: Electrical Engineering

Minor Focus: Mathematics

Highlighted Courses:

Microcontroller Programming, Digital Logic, Electromagnetics, Digital Signal Processing, Partial Differential Equations, and Modern Algebra

Outline (Microcontroller Programming, Digital Logic):

Used industry standard protocols and guidelines in producing efficient and versatile electronic components. Designed programs and components to outline simple processes and controlling actions ranging from data storage to LCD controls

Outline (Digital Signal Processing):

Gained familiarity with signal processing techniques of continuous and discrete time methods of Fourier, Z, and Laplace transforms to analyze and design optimal hardware for sampling and signal manipulation

Outline (Electromagnetics):

Utilized Maxwell's equations in both time and frequency domains to derive and manipulate equations relating to fields in free-space, lossy materials, waveguides, and antenna design

### **Central Community College, Grand Island, Nebraska**

Expected Graduation: May 2012

*Associate's Degree in Computer Integrated Manufacturing*

Highlighted Courses:

Allen Bradley Control Logix, Industrial Networking, Hydraulics, Human Machine Interfacing

### **Southeast Community College, Lincoln, Nebraska**

Graduated: September 24, 2008

*Associate's Degree in Microcomputer Technology (GPA: 3.97)*

Major Focus: Microcomputer Networking

Highlighted Courses: CCNA, TCP/IP, Network Security, Novell, Windows and Linux Server

Secondary Focus: Microcomputer Programmer

Highlighted Courses: C++, Java, JavaScript, JSP, VB, ASP.NET, Access, SQL, HTML/CSS

## WORK EXPERIENCE

### Software and Data Operations Engineer

May 2010 – December 2011

MACTEC Engineering and Consulting, Kabul, Afghanistan

Managed, configured, and administered various server installations and networking resources to maintain day-to-day operations and provide database access to clients across the entire country.

Worked with routers, firewalls, VPNs, switches and filtering devices to monitor and sustain a network of over 250 clients.

Tools used: Windows Server 2008/2003, Websense, SQL 2005 Enterprise, ArcGIS Server

Worked as lead programmer in a collaborative effort with the US Air Force's Combined-Joint Engineering division (CJ-ENG) to help design and maintain web-based computerized maintenance management system and project management utilities (ADIS). These modules were used to track assets and ongoing field projects and to provide real time support and preventative maintenance to bases all over the country

Created and maintained scope of work generating and construction drawing management application distributed across all regions of Afghanistan to RSC Engineers (WikiBuild).

Tools used: Telerik RadControls, ASP, C#, VB, XML, AJAX, SQL 2008 Express, and Griaule Biometrics

### Computer Support and Technician

August 2010 – December 2010,

J.A. Woollam Co., Inc, Lincoln, NE

October 2008 – December 2009

Provided technical support and production services to clients by building, soldering, and troubleshooting electronic boards and devices

Ensured customer satisfaction with preventative maintenance, regular system upgrades, and prompt turnaround and response times

Assembling and troubleshooting ellipsometers and control boxes for data collection and input/output

Testing and debugging with proprietary ellipsometer control software to analyze spectrometry data

### Computer Science and Engineering Internship

January 2010 – April 2010

National Security Agency, Ft. Meade, MD

Worked with industry leading programmers to design cryptography software utilizing the Agile Scrum programming methodology and a variety of programming languages.

Participated in legacy system overhaul and design, coding, and deployment of replacement solution.

Performed unit testing and daily builds to verify code quality and compliance.

Worked in small teams to determine project priorities, peer reviews, and mentoring.

Interacted with end users to perfect and optimize workflow, user interface design, and reporting services.

Conducted review sessions with clients to provide training, gain user feedback and optimization opportunities, and promote software interoperability.

Tools used: Java, Ruby, Perl, Python, Oracle 9i, Apache and Tomcat

### Web Applications Programmer

May 2009 – December 2009

TRIO Support Services, University of Nebraska, Lincoln, NE

Designed applications and web services that included database querying, data entry, and report generation.

Worked with applications including SQL 2008 Express, Visual Studio 2008, and InfoPath in languages including C#, JavaScript, XML, VB, and SQL

## SKILLS AND ACHIEVEMENTS

- Successfully passed the Fundamentals of Engineering (or EIT) exam in Fall of 2010
- Obtained TS/SCI with Full Lifestyle Polygraph Security Clearance in Winter of 2009
- Acquired Cisco Certification for Network Professional in Summer of 2011 (CCNP)  
Certification included various router and switch features in small, medium, and large networks of the 12.4 IOS feature set including: OSPF, EIGRP, RIP, STP, VTP, access-control lists, VLANs, virtual lines and trunk connections
- Able to operate swiftly in Windows, Mac and Linux environments for both client and server systems
- Freelance experience with MVC frameworks including Django and Ruby on Rails
- Circuit design skills in Eagle, Cadence and HSPICE analysis
- Computer Aided Design experience with AutoCAD, three years
- Computer Fabrication, dozens of desktop builds
- Network vulnerability and security analysis experience
- Dean's List every quarter at SCC as well as every Semester at UNL
- Calculus, Physics and Chemistry literate

## REFERENCES

### **Dr. Sina Balkir**

Professor and Graduate Chair  
Electrical Engineering Department  
237N SEC  
Lincoln, NE 68588  
(402) 472-1635  
sbalkir2@unl.edu

### **Dr. Saravanan Raju**

IT Specialist, TRIO Support Services  
220 Canfield Administration Building  
P.O. Box 880403  
Lincoln, NE 68588  
(402) 472-2027  
sraju@cse.unl.edu

### **Korey Mullins**

Operations Manager, MACTEC Engineering and Consulting  
Haji Yaqoub Square, First Street, House No. 293  
Shahr-e-Naw, Kabul, Afghanistan  
klmullins@mactec.com