

# The Economical Engineer

Greater Seattle Area, WA

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## Objective

To produce in an engineering and manufacturing environment where my work is both valued and useful; and also allows me to better my current skills while obtaining new ones.

## Skill Sets & Qualifications

( Portfolio or Samples available upon request )

### *Experience*

~ 9 years of engineering experience (~6yrs in BioTech, ~3yrs in Consumer Electronics)

### *Personal Considerations*

Organized • Well Spoken • Proficient Writer • Analytical • Can handle being challenged

### *Microsoft Excel*

Proficient with Macros, Graphing, Conditional Formatting and Complex Formulas

### *Technical Writing*

Technical Manuals for Technicians and New Users • Writes in spare time on Personal Interests

### *Computer Aided Drawing (CAD)*

Proficient with Solid Works • Experienced with other Polygonal Modelers • Some NURBS modeling

### *Basic to Advanced Computing*

MS Office • Parts and Vendors (Part Management software) • Troubleshooting

### *Rapid Prototyping/Manufacturing*

Manual 3 Axis Mill • Manual Lathe • Hand Metal Working Tools

Z-Corp's 3DP • Stratasys' FDM • Max-NC • 3D System's SLA

## Education

### *Continuing Education, Various Non-Accredited Institutions*

2008-Present

Interests include: Ethics, Economics, Law, & Business

### *Bachelors in Mechanical Engineering, University of Washington (3.4 on 4.0 Scale)*

2003-2005

Courses of Note: System Dynamics, Design, Finite Element Analysis (FEA), Adv.

Technical Writing, Adv. Rapid Prototyping, Kinematics and Linkage Design

### *Associate of Science, Community College (3.5 on 4.0 Scale)*

2000-2003

Courses of Note: Technical Writing, Public Speaking, and Visual Basic and C++.

## Activities & Miscellaneous Information

### *Personal Interests*

Outdoor Activities: Backpacking, Camping, Hiking

Studies & Writings: Health, Economics, Political Theory, Financials, Theology

### *Nehemiah International and Kakamega PEFA Church, Kenya*

2007 – 2008

To build myself up physically, mentally and socially by volunteering on a

Kenyan farm and experiencing typical City life from a native perspective.

2011

### *Island Breeze Discipleship Training School, New Zealand & Fiji*

2005 – 2006

To develop myself in terms of culture adaptation, social skills and to see the world from a unique perspective.

## Work Experience

### **BioTech Corporation, Seattle WA**

#### *Mechanical Engineer*

2/2007 – Present

- Assisted with the development of our 2<sup>nd</sup> generation instrument
- Designer of instrument updates, fixes and improvements
- Order and managed over \$250k of quotes, purchase orders and incoming R&D parts, and act as the primary engineering contact for our Production and R&D vendors.
- Accurately budgeted for the 2<sup>nd</sup> generation instrument cost based on prototypes
- Developed multiple Excel workbooks for use in Production, Field Service and Engineering that assist with keeping track of part test information, Instrument release information & Instrument in-field configurations.
- Actively participates in Field Service calls to resolve the customer issue and then determine if the problem needs to be resolved through design, production or vendors

#### *Manufacturing Engineer*

4/2006 – Present

- One of two founding member of the Manufacturing/Production Department
- Assisted in transfer of the instrument to the new Production Department
- Develop and control documentation on testing and releasing the instrument
- Track Engineering Change Orders (ECO) in production and customer instruments
- Create ECOs and work them through all stages (design, ordering, testing, approval, documentation and production transfer)
- Continued development of the ECO process from its initial stage in 2007 to current

### **Consumer Electronics Corporation, Seattle WA**

#### *Engineering Technician*

1 Year

- In an engineering team of two, I handled multiple projects as Designer, Tester, Inspector, Assembler, Tech Writer and Tech Support for a Heads-Up Display commercial device specifically geared towards motorcycle enthusiasts.

### **Private Consulting Firm, Bothell WA**

#### *Engineering Technician*

2.5 Years

- As the 2<sup>nd</sup> member of this consultant firm I was a key Drafter, Design Engineer (SolidWorks), Assembler, Test Engineer, Electrician, and Machinist.

### **Manufacturing Plant, Bothell WA**

#### *Process Technician (Two Internships)*

3 Month Stint

6 Month Stint

- Developed Assembly Build Instructions (ABI) for use as training materials
- Wrote Document Change Notices (DCN) for various projects.
- One set of ABI's were sold to the project originator for \$15,000.