**Joseph Huxley**

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**Electrical Engineer / EIT**

*Solutions-oriented and analytical with history of success contributing to reliable, best-in-class Integrated Circuit (IC) design, sensor production, and sound quality-control procedures.*

Adept at readily gathering and translating complex requirements into viable solutions. Strong production background involving C# and proficiency with laboratory test and measurement tools. Cost-conscious; implement timesaving measures to optimize production. Excel at collaborating across departments; coordinate with staff and managers to complete projects on time and within budget. ***Engineering and technical expertise includes…***

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| ***PLCs:*** | Allen Bradley, Siemens, GE Fanuc |
| ***Design:*** | A/D and D/A Conversions; Circuits; Analog / Digital / Mixed-signal Design |
| ***Methodologies:*** | Experimental, Numerical, Analytical Robustification; Design for Six Sigma (DFSS) |
| ***Tools:*** | MATLAB, AutoCAD, Autodesk, LabVIEW, OrCAD, Wonderware, Mathematica |
| ***Production:*** | Validation Testing; Process Automation / Improvement; Fabrication and Simulation; Human-machine Interfaces (HMIs); Sensors (vibration, pressure, force, gas, and inertial) |

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| Experience Highlights |  |

**Malpais Systems**, Des Moines, Iowa

**Electrical Engineer,** 8/2011 – Present

Integral in the design, development, testing of vibration, pressure, force, gas, and inertial sensors. Create analog, digital, D/A, A/D, and mixed-signal circuit designs as well as electrical specifications for new system designs. Actively involved in full life design cycle, from requirement definition through design, prototyping, proof of concept, testing, and interface implementation; outline and develop validation test plans.Co-author comprehensive support documents for Fabrication, Integrated Circuit (IC) Design, PCB Design, and ASIC Design teams. Interface with internal customers and external production / mechanical engineering teams.

*Selected Contributions:*

* Saved potentially thousands in production costs by identifying strategic improvements to product life cycle during the New Product Development (NPD) process.
* Triggered 2.3% increase in sensor reliability by developing testing validation procedures.
* Played key role in ensuring team efforts met—and often exceeded—all financial, performance, quality, and reliability goals.

**BOKA Tech**, Des Moines, Iowa

**Electrical Engineer,** 12/2009 – 8/2011

Served as core member of cross-functional team responsible for state-of-the-art sensor systems development involving vibration, pressure, and inertial sensors. Assisted in defining product requirements, identifying best concepts / designs, and implementing into production of new sensor solutions; incorporated DFSS design tools and methodology throughout design process. Created analog, digital and mixed signal circuit designs. Utilized PSpice to simulate circuit / sensor computer models and created electrical specifications for new sensor designs.

*Selected Contributions:*

* Conceived solution to improve high resolution analog measurements and increase production quality.
* Contributed to increased throughput by rapidly diagnosing and correcting issue that impacted baseline performance.
* Successfully leveraged sound signal integrity principles and noise reduction techniques, leading to system robustification.

**Novsky Industries, LLC**, Des Moines, Iowa

**Electrical Systems Intern,** 6/2009 – 12/2009

Gained valuable hands-on experience supporting team of Electrical Engineers responsible for safe, efficient aluminum production. Performed quality / verification testing on pumps, valves, controls, and sensors in automated manufacturing environment.

*Selected Contributions:*

* Built collaborative rapport with Controls Engineer to effectively conduct I/O Systems and Human-machine Interface (HMI) troubleshooting.
* Expertly performed preventative maintenance and calibration of equipment and systems, earning outstanding reputation for proficiency and quality.

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| Education & Credentials |  |

**Bachelor of Science, Electrical Engineering (BSEE)**, 2009

University of Illinois at Chicago (UIC), Chicago, Illinois

*Eta Kappa Nu Honor Society ~ Institute of Electrical and Electronic Engineers (IEEE)*

***Professional Development***

* Engineer in Training (EIT)
* Wireless Communications
* Digital Communications
* Digital Signal Processing