meganbnix@gmail.com   **MEGAN NIX (formerly Megan Nix Nissen)**   951-204-1793

Goal: Seeking to further my education to modernize my web and software development skills.

SUMMARY

- Graduated in Electrical Engineering with a **3.99 GPA** and over 20 **scholarships and awards**.
- Three years experience in **Ruby on Rails** software design, development, management (3-6 developers), and testing/debugging involving an application with code exceeding 30,000 lines.
- Professional and educational experience with languages including **Java, C++, MATLAB, LabVIEW, C,** and **Ruby**.
- Constructed and programmed an **autonomous robot** for a several months long design project.
- Constructed and programmed **scientific testing apparatuses** in labs at the University of California, Riverside, NASA, and the California Institute of Technology.
- Created 20+ websites using **HTML, CSS, Ruby on Rails, Dreamweaver,** and **Photoshop**. **Portfolio (meganbnix.com)**
- Award-winning **technical writer and presenter**.

EDUCATION

- **Auburn University:** Computer Engineering and Philosophy
- **University of California at Riverside**: Bachelor of Science, Electrical Engineering (GPA: 3.99)
- **Georgia Institute of Technology:** Online Master of Science, Computer Science (completed two semesters)

RELEVANT COURSEWORK

- **Engineering:** Software Development Process (using Java); Computer Networks; Info Security; Machine Learning; C++; Digital Systems; Embedded Systems; Data Acquisition, Instrumentation, and Process Control; Communication Systems; Automatic Control; Computer Vision; Signals and Systems; Machine Organization and Assembly Language Programming; Modeling and Simulation of Dynamic Systems
- **Math:** Calculus; Differential Equations; Linear Algebra; Discrete Mathematics; Logic; Probability & Statistics

SELECTED EXPERIENCE

- **TECHCYCLED**   2010-2015
  President
  - Created a small business that recycled electronics into jewelry; achieved profitability in second full year.
  - Customized a Shopify store using HTML, CSS, and Liquid (proprietary programming language).

- **E2G2, INC.**   2007-2010
  Senior Analyst
  - Independently developed a complex prototype web application in Ruby on Rails and MySQL.
  - Helped manage a team of 3-6 full time developers to create a final product using agile methodology.
  - Developed specifications/use cases and interfaced between technical and non-technical departments.
  - Organized usability tests and tested/debugged using scripting and tools such as JMeter.

- **UNIVERSITY OF CALIFORNIA AT RIVERSIDE**   2004-2007
  Undergraduate Research: Nano Electrochemical System Laboratory
  - Built/programmed (LabVIEW) custom instrumentation to test thermoelectric materials and nanosensors.

  WIRELESS AUTONOMOUS CONTAMINANT TRACKING ROBOT
  - Developed contaminant sensing and navigation algorithms in C for the Motorola HC12 microcontroller.

- **CALIFORNIA INSTITUTE OF TECHNOLOGY**   2006
  Minority Undergraduate Research Fellowship
  - Researched spin valves using soft lithography techniques and advanced scientific equipment.

- **NASA JET PROPULSION LABORATORY**   2005
  Internship: Electronic Nose Lab
  - Constructed, programmed (LabVIEW), and ran experiments with gas sensor testing apparatus.

- **OTHER**   1999-2001 and 2003-2005
  Entrepreneur
  - 1999 (age 19): started a small business involving custom-built PC sales and service.

- o   2003: started a small e-commerce business selling virtual goods.

PUBLICATIONS
- **M. B. Nix**, M. L. Homer, A. Kisor, J. Soler, J. Torres, K. Manatt, A. Jewell, M. A. Ryan, "Sniffing out problems for humans in space", *IEEE Potentials, Vol. 26, No. 4, pp: 18-24, July/August 2007*.
- **M. B. Nix**, H. W. Ch. Postma, M. W. Bockrath, "Fabrication of Spin Valves using Soft Lithography Techniques", *Caltech Undergraduate Research Journal, Vol. 7, No. 1, pp: 34-39, Summer 2006.*
- T. Zhang, **M. B. Nix**, B.-Y. Yoo, M. A. Deshusses, N. V. Myung, "Electrochemically Functionalized Single-Walled Carbon Nanotube Gas Sensor", *Electroanalysis*, Vol. 18, Issue 12, pp: 1153-1158, June 2006.

SELECTED HONORS AND SCHOLARSHIPS
- 2007 Marlan and Rosemary Bourns Award (awarded to two outstanding engineering seniors)
- First place, 2006 Institute of Electrical and Electronics Engineers Region 6 Paper Contest
- 2006 Outstanding Leadership Award for the Bourns College of Engineering (awarded to one student)
- First place, 2005 Society of Women Engineers National Technical Presentation Competition
- 2005 Outstanding Student Award for Bourns College of Engineering (awarded to one student)
- 2005 Rosemary S. J. Schraer Memorial "Outstanding Woman Who Makes a Difference" Award (one recipient is chosen from among UCR students, faculty, and staff)
- Scholarships: The Armed Forces Communications and Electronics Association, Tau Beta Pi, Golden Key, Universities Space Research Association, USA Funds, UCR COE/NSF Scholar, Jameson Scholar, SWE-Orange County, and ~10 others not listed here (full list available upon request).
- Honor societies: Tau Beta Pi, Golden Key

SELECTED LEADERSHIP AND ACTIVITIES
- Chair and webmaster, UCR Bourns College of Engineering Leadership Council (COELC)
- Vice President, Institute of Electrical and Electronics Engineers at UCR (IEEE)
- Secretary and webmaster, Society of Women Engineers (SWE)
- Webmaster for 5 total organizations and winner of the BCOE Outstanding Website Award