Varun R Gandhi

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TECHNICAL SKILLS

- Languages: JavaScript, Java, MATLAB, C++, HTML, CSS
- Libraries/Frameworks: Web Components/Custom Elements, Dojo, Java Swing, JQuery, Bootstrap, QUnit, Boost
- Project Management: Jira, Confluence, Workfront
- Development Tools: NPM, Grunt, Maven, Make, Shell Scripting, Node, UML
- Version Control: Perforce, CVS, Git
- Operating systems: Macintosh, Windows, Linux/Unix baszed OS

EXPERIENCE

Development Manager, JavaScript Widgets and UITools, The MathWorks, MA *May 2016 – Present*

- Responsible for managing a 4 person development team for delivering MATLAB's web based UI framework.
- Involved in all aspects of product life-cycle, including requirements gathering, high-level design, hands-on coding, release/sprint planning, and interfacing with Marketing and other customer facing engineers.
- Collaborated with multiple cross-functional teams to define modern web technology stack used at MathWorks.
- Led complex user workflow projects and enabled the team to deliver them efficiently.
- Built an efficient team via continuous process improvements and applying agile methodologies.

Senior UI Platform Engineer, The MathWorks, MA *May 2013 – May 2016*

- Responsible for all aspects of Software Design Life Cycle from concept to design and implantation of MATLAB's UI building framework.
- Key contributor on the team for architecture, code reviews and a proponent of easy to use, well documented and high quality client and server APIs.
- Applied test-driven development techniques using QUnit, FuncUnit and MATLAB-Unit test frameworks to provide reliable software.
- Led the efforts to develop dialogs, banners, notifications and other re-usable web widgets using a web-based framework, which were then used by various clients across the company.
- Conceptualized a vision for the next generation UI that addresses user pains around printing and exporting MATLAB graphics visualizations.
- Collaborated with cross-functional teams such as QE, Usability and Visual Designers at different phases of SDLC .

UI Platform Engineer, The MathWorks, MA *Sep 2010 – May 2013*

- Responsible for quality improvements and enhancements to MATLAB's UI building components.
- Developed highly object oriented MATLAB and C++ code for the model and controllers in a large MVC based system.
- Used Java Swing and Web technologies to develop the views for the UI framework.
- Explored/prototyped the use HTML5, JavaScript and other web based technologies into the existing legacy Java Swing code base.
- Worked on internationalization of the product to support different spoken/written languages

Application Support Engineer, The MathWorks, MA *Jan 2009 – Sep 2010*

- Responsible for gathering and providing customer feedback to development teams for improvements on core MATLAB functionality.
- Specialized in the MATLAB Object System and Graphics/GUI areas.
- Worked on development and quality engineering projects to design UIs and data visualizations

Application Support Engineer Intern, The MathWorks, MA *Jan 2008 – July 2008*

- Responsible for technical support for MATLAB on the MATLAB-Math support team.
- Gained experience in the area of MATLAB programming, Graphics, Image Processing and Graphical User Interface building tools and other core MATLAB functionalities.

Graduate Trainee, Searock Precision Machinery, Bangalore, India *Jan 2006 – July 2006*

- Worked in the area of tooling design for diesel engine fuel pump housings & exhaust manifold of earth moving equipment
- Successfully designed jigs & fixtures for manufacturing components on a vertical machining center and gained knowledge of process and design failure mode event analysis.

PUBLICATIONS AND RESEARCH

Graduate Research Assistant, Vibrations Control and Electro-mechanics laboratory (VCEL), Texas A&M University. *Jan 2007 – May 2009*

- Research paper published on "High Temperature, Permanent Magnet Biased, Fault Tolerant Homopolar Magnetic Bearing Development", for the International Gas Turbine Institute (IGTI) at the 2008 ASME Turbo Expo in Germany.

Chief Engineer, Formula SAE, R.V. College of Engineering, India *Sep 2004 – Dec 2005*

- Designed & fabricated a formula style race car based on the Formula-Society of Automotive Engineers (FSAE) specification with key contributions in the chassis, body and suspension design using Pro-E and ANSYS.
- Successfully participated at the inter-university FSAE competition held in Melbourne, Australia.

Undergraduate research project, G.T.R.E. (Gas Turbine Research Establishment), Defense R&D Organization, Bangalore, India *Mar 2005 – June 2005*

- Performed experimental and computational modal analysis of a gas turbine compressor blade

EDUCATION

- **Master of Science (MS) in Mechanical Engineering** (Design & Control Systems) at Texas A&M University. GPA: 3.4 *Aug 2006 – May 2009*
- **Bachelor of Engineering (B.E.) In Mechanical Engineering**, R.V. College of Engineering, Bangalore, India. Grade: First Class with Distinction – GPA: 3.7 *Aug 2001 – June 2005*