

# Wei Cui

## SUMMARY OF QUALIFICATIONS

- Strong analytical and problem-solving skills.
- Ability to work independently and to meet deadlines with constantly changing priorities.
- A good follower, a role player, a quick learner, and a team player. Proactive and easy going.

## EDUCATION

**University of Washington** 2010 - 2013, Seattle, WA  
MS in Electrical Engineering GPA: 3.74/4

**SKILLS:** Java, C#, Python, C/C++, Linux, PHP, Drupal, AJAX, JavaScript, Nodejs, MySQL. Computer Programming, Web Programming, Microcomputer/Embedded Systems, Data Structures and Algorithms, Statistical Learning, Machine Learning, Artificial Intelligence, Computer Vision. Github: 360wcui

**Washington State University** 2008 - 2010, Vancouver, WA  
MS in Mechanical Engineering GPA: 4.00/4

**SKILLS:** AutoCAD, SolidWorks, CoventorWare. ANSYS, MATLAB, Advanced Control Theory, System Integration, Structural Analysis, Nanotechnology, Microfabrication Technologies, Semiconductor Devices, Micro-electro Mechanical Systems (MEMS), VLSI, Automation.

**Fudan University** 2004 - 2008, Shanghai, China  
BS in Aerospace and Aeronautical Engineering GPA: 3.00/4

**SKILLS:** Finite Element Analysis, Advanced Dynamics, Structural Vibrations, Control Theory, Aircraft Design, Aerodynamics, Fluid Mechanics, Solid Mechanics.

## RELATED EXPERIENCE

**Cybersecurity Engineer, *Enterprise Ground Services, US Air Force*** Los Angeles AFB, 2016 – Present

- Software Development Kit (SDK) Scrum Lead
  - Lead a group of six contractors to develop, maintain, and test the SDK of EGS that is consistent with the Interface Specification Documents (ISDs)
  - Develop Bus Monitoring Tool in Java FX and demonstrate its capabilities in the IDRs.
  - Defend the government to own the data rights and common interfaces that are interpretable by various mission partners.
  - Coordinate with the software developers of the mission unique software (MUS) and ensure SDK compliancy.
- CompTIA A+, Network+, Security+, and CSFI Defensive Cyber Operations Engineer certified.
- 3/13 Directorate 2<sup>nd</sup> Lt (SMC/CV), vital Cyber Division superior engineer.

**Financial Management Technician, *US Army*** Joint Base Lewis-McChord, WA, 2014 - 2016

- Developed ATHENA in Java (20MB) to streamline the operation in the office on my own initiative.
  - Guarantees 90% efficiency increase and 100% accuracy with ATHENA.
  - Saves the government almost \$2M on man hours and office supplies every year.
  - Approved by Defense Finance and Accounting Services (DFAS) and deployed in the Army worldwide.
  - Processed military pay for 30,000+ military soldiers, Section Lead.

**Software Engineer Intern, *Sensoria*** Redmond, WA, 2013

- Design and develop user interface with .NET WPF and Android SDK.

- Apply classification and machine learning to health monitoring systems.
- Develop data visualization service for better user experience in Java 3D.

**Research Assistant, *University of Washington, Electrical Engineering***

Seattle, WA, 2010 - 2013

- **Project:** Optimization of High-dimensional Systems
  - Develop simulation efficient high-dimensional regression models using Gaussian processes.
  - Invent novel sampling techniques for design of high-dimensional systems.
  - Apply multivariate statistical analysis, Markov chain Monte Carlo, kernel methods, GA, particle swarm optimization, PCA to real engineering problems.
  - Publish three first-author papers.
- **Project:** 3D inkjet printing system and MEMS optical scanner
  - Develop 3D inkjet printing station and fast design and optimize MEMS optical scanner for endoscope purposes.
  - Publish four first-author papers.

**Teaching Assistant, *University of Washington, Electrical Engineering***

Seattle, WA, 2010 - 2013

- Embedded Systems (undergraduate and graduate levels): Course syllabus design and project work on TI Stellaris ARM Cortex-M3 microprocessor, and Raspberry Pi. Integrate web servers, FreeRTOS on the embedded systems.
- VLSI: Layout and schematic design of SRAMS, adders, and multipliers in HSPICE and Cadence.
- Computer Aided Design and Analysis: Develop HSPICE like circuit simulators in C.

**Research Assistant, *Washington State University***

Vancouver, WA, 2008 - 2010

- Fast simulation and finite element analysis of high-performance MEMS gyroscopes in CoventorWare with feedback control.

**PUBLICATIONS**

- [1]. **W. Cui**, A. Sathanur, V. Jandhyala, "Simulation-based Design of High Dimensional Electromagnetic Systems," 21<sup>st</sup> conference on electrical performance of electronic packaging and systems (EPEPS), Tempe, AZ, USA, October 21-24, 2012.
- [2]. **W. Cui**, V. Jandhyala, "High-dimensional electromagnetic design sensitivity," 2012 IEEE International Symposium on Antennas and Propagation and USNC-URSI National Radio Science Meeting, Chicago, IL, USA, July 8-14, 2012.
- [3]. **W. Cui**, S. Swagato, V. Jandhyala, "Large orthogonal array-based optimization for high-dimensional parametric systems," 2012 IEEE International Symposium on Antennas and Propagation and USNC-URSI National Radio Science Meeting, Chicago, IL, USA, July 8-14, 2012.
- [4]. **W. Cui**, C. L. Chang, W. C. Wang, "PEDOT pillar fabrication using DOD inkjet system," SPIE Symposium on Health Monitoring of Structural and Biological Systems 8348, 834819, San Diego, CA, 2012.
- [5]. W. Hua, W. C. Wang, W. Wu, C. L. Tsui, **W. Cui**, W. Shih, "Development of 2-D microdisplay using an integrated microresonating waveguide scanning system," Journal of Intelligent Material Systems and Structures, 22(14), 2011, 1613-1622. (I did ANSYS simulation of PZT scanner and data visualization)
- [6]. **W. Cui**, W. C. Wang, "Design and optimization of a low frequency non-resonant scanning endoscope operating at large damping," International Symposium on Optomechatronic Technologies, IEEE ISOT 2011, Nov 1-3, Hong Kong.
- [7]. K. Gu, C-C. Lee, **W. Cui**, M. Wu, W. C. Wang, "Design and fabrication of mechanical resonance based scanning endoscope," The 16th International Conference on Solid-State Sensors, Actuators and Microsystems, IEEE Transducers 11, Beijing, China, June 5-10, 2011, 1574-1577. (I did the fast simulation)

- and design of the MEMS scanner in Matlab and CoventorWare)
- [8]. **W. Cui**, W. Xue and X. Chen, "Compensator design for a MEMS gyroscope with quadratic optimal control," ASME DETC/CIE, DETC2010-28533, Quebec, Canada, 2010.
  - [9]. **W. Cui**, X. Chen and W. Xue, "Robust compensator control of a non-resonant MEMS gyroscope with linear quadratic regulator," ASME IMECE 10, IMECE2010-38871, British Columbia, Canada, 2010.
  - [10]. X. Chen, **W. Cui** and W. Xue, "Process modeling and device-package simulation for optimization of MEMS gyroscopes," Journal of Computer-Aided Design and Applications, 6(3), 2009, 375-386.
  - [11]. **W. Cui**, X. Chen and W. Xue, "Design optimization for a non-resonant MEMS gyroscope," ASME IMECE 09, IMECE2009-10812, Florida, USA, 2009.

## HONOR AND AWARDS

- Army Commendation Medal (2<sup>nd</sup> Award) June, April 2016
- Army Achievement Medal (2<sup>nd</sup> Award) Aug 2015, June 2014
- Global War on Terrorism Service Medal June 2014
- National Defense Service Medal April 2014

# Wei Cui

has successfully completed the  
requirements to be recognized as



COMP001021140083

CANDIDATE ID

April 06, 2017

CERTIFICATION DATE

EXP DATE: 01/02/2021

A handwritten signature in black ink, appearing to read "TThibodeaux".

TODD THIBODEAUX, PRESIDENT & CEO

Code: HLLBX0GNJPVE1450

Verify at: <http://verify.CompTIA.org>

# Wei Cui

has successfully completed the requirements to be recognized as



COMP001021140083

CANDIDATE ID

September 22, 2017

CERTIFICATION DATE

EXP DATE: 01/02/2021

A handwritten signature in black ink.

TODD THIBODEAUX, PRESIDENT & CEO

Code: CV64BT9HJKQ1QBG

Verify at: <http://verify.CompTIA.org>



# Wei Cui

has successfully completed the requirements to be recognized as



COMP001021140083

CANDIDATE ID

January 02, 2018

CERTIFICATION DATE

EXP DATE: 01/02/2021

A handwritten signature in black ink.

TODD THIBODEAUX, PRESIDENT & CEO

Code: DM6Q1LSP3H4E1E3E

Verify at: <http://verify.CompTIA.org>