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# Devendra Kumar Tewari

Curriculum Vitae

2019-23-01

## 1 Contacts

- Email
- GitHub
- LinkedIn
- Twitter

## 2 Work Experience

### 2.1 Software Engineering Specialist at CESAR (2010 to Present)

#### 2.1.1 Motorola Solutions

##### UK Emergency Service Network

- Interim Provisioning Solution (IPS)
  - Active Directory, C#, Entity Framework 6, Git, GitLab, HTTP/S, Kodiak MCPTT, LDAP, SOAP 1.1, SoapUI, SQL Server, TLS 1.2, WCF, WPF

##### WAVE PTT

- Integration with Data MOTOTRBO Network Interface Service
  - C#, HTTP/S, IIS, openSIPS, SIP, TCP/TLS, UDP, WAVE 5000, WPF
- Thin Client Protocol dissector in Lua for Wireshark
- Third-party application developer support

##### Intelligent Middleware

- Intelligent Middleware ASTRO and MOTOTRBO Device Simulator
  - C#, HTTP, ONC RPC, SMTP, WebSocket, Windows Forms, XMPP
- Intelligent Middleware REST API Test Tool
  - C#, HTTP, WebSocket, Windows Forms, XMPP
- Sample code for Intelligent Middleware and WAVE 7000
  - Android, Bluetooth SPP, C#, Java, OAUTH 2, Swift, WebSocket, Windows Forms, iOS
- Speaker at APPFORUM conferences and developer workshops in the Americas and EMEA
- Brazilian Army
  - Django, Python, SIP, WebRTC

**Documentation as Code**

- Word to Markdown proof of concept
  - Custom *LaTeX* template for Pandoc
  - Sequence charts
  - Docker image with Mermaid.js, Pandoc, and TeX Live

**ASTRO P25**

- Option Board Reference Hardware and Software
  - ATmega32U4, Altium Designer, C, C#, Fritzing, Windows Forms, Wiring
- Option Board Capture Tool
  - C#, TotalPhase Beagle USB Analyzer, Windows Forms
- Protocol dissectors in Lua for Wireshark
- Third-party application developer support

**TETRA**

- TETRA PEI Capture Tool
  - C#, TotalPhase Beagle USB Analyzer, Windows Forms
- Remote Display Control Sample Application
  - C#, Run-Length Encoding, Windows Forms
- Protocol dissectors in Lua for Wireshark
- Speaker at APPFORUM conferences in EMEA
- Third-party application developer support

**MOTOTRBO**

- Configuration Advisor Tool
  - C#, Windows Forms
- System Design Tools
  - C#, CSS, HTML, JavaScript, Windows Forms
- Generic Option Board Flash Tool
  - C#, Windows Forms
- Option Board Capture Tool
  - C#, C++, Saleae Logic Analyzer, Windows Forms
- Generic Option Board Fixture
  - Altium PCB Designer
- Site Survey Tool

- Android, C#, Windows Forms, Xamarin
- Protocol dissectors in Lua for Wireshark
- Sample Applications
  - Arduino, Atmel AVR32, Bluetooth LE, C, C++, C#, CSS, FreeRTOS, HTML5, JavaScript, Linux, RFID, Raspberry Pi, Ruby, Sensors, Windows Forms
- Speaker at APPFORUM conferences in the Americas and EMEA
- Third-party application developer support

### **2.1.2 Fiat Chrysler**

- Development of low cost connected car mobile applications
  - Android, BeagleBoard, CAN bus, Java, Kvaser CAN Analyzer, Linux, Objective C, iOS

### **2.1.3 Hewlett Packard Labs**

- Distance education application with multi-modal interactions for HP Labs, Bangalore
  - C, GStreamer, JavaScript, Linux, Node, Raspberry Pi

## **2.2 Software Development Supervisor at Modular Mining Systems (2008 to 2010)**

Development of ProVision™ shovel machine guidance system

- Bucket Positioning System
  - C#, Inclinometers, Tilt Sensors
- Surface Raster to Triangulated Irregular Network
  - C#, Excel 3D Charts
- Dual GPS Positioning with Differential Error Correction
  - Helmert Transformation, NMEA, Telnet, TopCon GPS, WGS84
- Performance Optimization
  - C#, SQL Server, Windows CE
- Team management

## **2.3 Engineering Manager at CESAR (2007 to 2008)**

- Pre-sales
- Project resource management
- Performance appraisals
- Process improvement

## 2.4 Senior Software Engineer at CESAR (2002 to 2007)

- Push-To-Talk over Cellular (PoC) client for Samsung, Campinas
  - ARM, C, CVS, Eclipse, IMS, Java, Linux, Mantis Bug Tracker, OMA PoC, SIP/SDP, SQL, XML, XCAP
- J2ME Games for LGE
  - CVS, Eclipse, Java, Tile Studio
- OSGi R4 TCK for IBM
  - Eclipse, Java, OSGi
- Pre-sales Application for Embraer, SJC
  - 3D Modeling, Apache FOP, Apache Struts 2, Bugzilla, CVS, Flash, HSQLDB, HTML, Hibernate, J2EE, Java, JavaScript, Oracle, SQL, Tomcat, Viewpoint Media Player, XSL:FO, XSLT
- Platform 2000 Development for Motorola, Campinas
  - C, C++, Java, Linux
- End to end Development for Motorola, Campinas
  - Apache Tomcat, CVS, ClearCase, J2EE, J2ME, JBoss, Java, Linux

## 2.5 Senior Software Engineer at Unisys (2001 to 2002)

- Software requirements, design and development of security and access control, and other web applications
  - DB2, HTML, J2EE, Java, JavaScript, UML

## 2.6 Senior Software Engineer at ITECI (2000 to 2001)

- Web applications, Storm Consulting, London
  - HTML, JavaScript, VB 6, XSLT
- LINC II Course Instructor, Bompreço, Recife
- XML Course Instructor, BCP, Recife
- Java Course Instructor
- Banking applications for Caixa Economica Federal, Brasilia
  - ASP, Erwin, HTML, Java, JavaScript, Linux, PHP, SAP Sybase PowerDesigner, SQL Server, VB 6
- Financial application for Banco Opportunity, Rio
  - ASP, SQL Server, VB 6, Windows

## 2.7 Software Engineer at Enfase (1998 to 2000)

- Banking Applications, Bandepe
  - COBOL, LINC II, SQL Server, Unisys A Series, VB 6, Windows, XGEN
- Client-server application, Frigorífico Ibérico
  - Crystal Reports, SQL Server, VB 6, Windows NT

## 2.8 Software Engineer at Tata Infotech/Unisys (1996 to 1998)

- Year 2000 consultancy at Toysrus (New Jersey), Bompreço (Recife), and Bancafé (Bogota)
  - ALGOL, C, COBOL, LINC II, Unisys A Series, XGEN
- DMS II course instructor
- COBOL 74 course instructor

## 2.9 Student Instructor at RAIT (1995)

- Organizer of TECHNOVATE 1996
- Organizer of C programming workshop
- C programming course instructor

## 3 Education and Courses

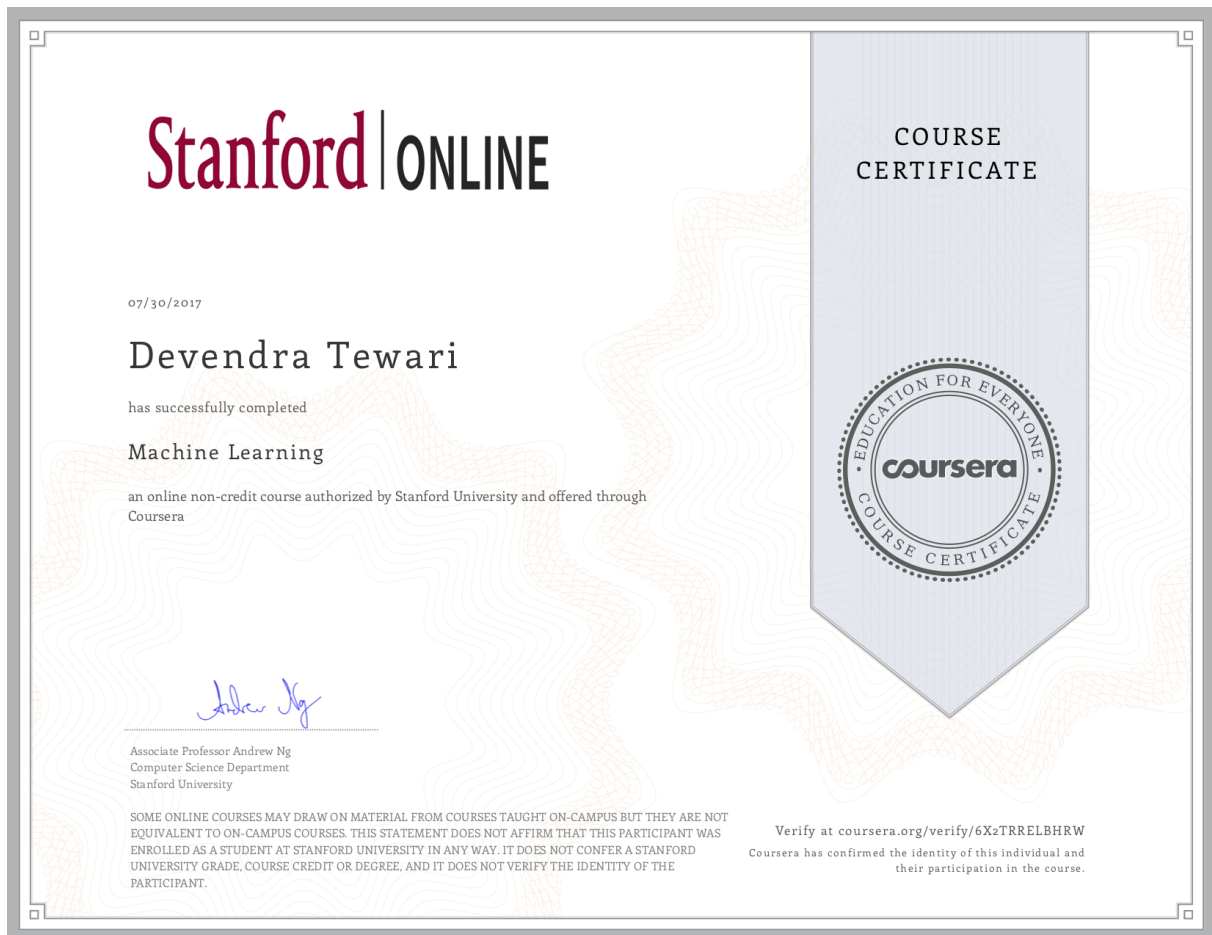
- **WAVE Certified Integration Engineer**, 2018, Motorola Solution
- **Xamarin Forms: Build Native Cross-platform Apps with C#**, 2018, Udemy
- **Algorithms I**, 2017, by Princeton University on Coursera
- **Machine Learning**, 2017, by Stanford University on Coursera
- **New Trainee Program**, 1996, Tata Unisys
- **Bachelor of Engineering in Electronics**, 1992-1996, RAIT, University of Mumbai

## 4 Languages

- English
- French (studied at school, lack fluency)
- Hindi
- Portuguese
- Spanish (studied when living in Colombia, lack fluency)

## 5 Attachments

### 5.1 Machine Learning



**Figure 1:** Machine Learning by Stanford University on Coursera

Follow link to see grade achieved.

## 5.2 Portuguese Proficiency



**Figure 2:** Celpe-Bras Brazilian Portuguese Proficiency Certificate