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# Devendra Kumar Tewari

Résumé

2018-09-01

# 1 Work Experience

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

### 1.1.1 Motorola Solutions

#### WAVE 5000 / ONCLOUD

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

#### Emergency Service Network (ESN)

- Interim solution to provision Subscriber Identity Modules (SIMs) on UK's ESN
  - Active Directory, C#, Entity Framework 6, Git, GitLab, HTTP/S, SOAP 1.1, SoapUI, SQL Server, TLS 1.2, WCF, WPF

#### 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

#### Intelligent Middleware

- Intelligent Middleware 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

**APX™**

- Third-party application developer support
- 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
- Wireshark Dissectors in Lua

**DIMETRA™**

- Third-party application developer support
- Speaker at APPFORUM conferences in EMEA
- 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

**MOTOTRBO™**

- Third-party application developer support
- Speaker at APPFORUM conferences in the Americas and EMEA
- System Design Tools
  - C#, CSS, HTML, JavaScript, Windows Forms
- Sample code
  - Arduino, Bluetooth LE, C#, CSS, HTML5, JavaScript, Linux, RFID, Raspberry Pi, Ruby, Sensors, Windows Forms
- Generic Option Board Fixture
  - Altium PCB Designer
- Sample code for the Generic Option Board
  - Atmel AVR32, C, C#, FreeRTOS, Windows Forms
- Configuration Advisor Tool
  - C#, Windows Forms
- Generic Option Board Flash Tool
  - C#, Windows Forms
- Option Board Capture Tool
  - C#, C++, Saleae Logic Analyzer, Windows Forms
- Site Survey Tool

- Android, C#, Windows Forms, Xamarin
- Protocol dissectors in Lua for Wireshark

### **1.1.2 Fiat Chrysler**

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

### **1.1.3 Hewlett Packard Labs**

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

## **1.2 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

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

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

## **1.4 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

### **1.5 Senior Software Engineer at Unisys (2001 to 2002)**

- Security and Access Control application for SEFAZ-PE
  - DB2, HTML, J2EE, Java, JavaScript, UML

### **1.6 Senior Software Engineer at ITECI (2000 to 2001)**

- Web applications for Storm Consulting, London
  - HTML, JavaScript, VB 6, XSLT
- XML Course for BCP
- 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

### **1.7 Software Engineer at Enfase (1998 to 2000)**

- Banking Applications for Bandepe
  - COBOL, LINC II, SQL Server, Unisys A Series, VB 6, Windows, XGEN
- Client/Server application at Frigorifico Iberico

- Crystal Reports, SQL Server, VB 6, Windows NT

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

- Year 2000 consultancy at Bancafe, Bogota
- Year 2000 renovation at Bompreço, Recife
  - COBOL, LINC II, Unisys A Series
- Year 2000 renovation at Toysrus, New Jersey
  - ALGOL, C, COBOL, LINC II, Unisys A Series, XGEN

## 2 Education and Courses

- **Xamarin Forms: Build Native Cross-platform Apps with C#** 2018, Udemy
- **Algorithms I** 2017, by Princeton University on Coursera
- **Machine Learning** June to July 2017, by Stanford University on Coursera
- **Bachelor of Engineering in Electronics** 1992 to 1996, at Ramrao Adik Institute of Technology, University of Mumbai

## 3 Languages

- English
- Hindi
- Portuguese

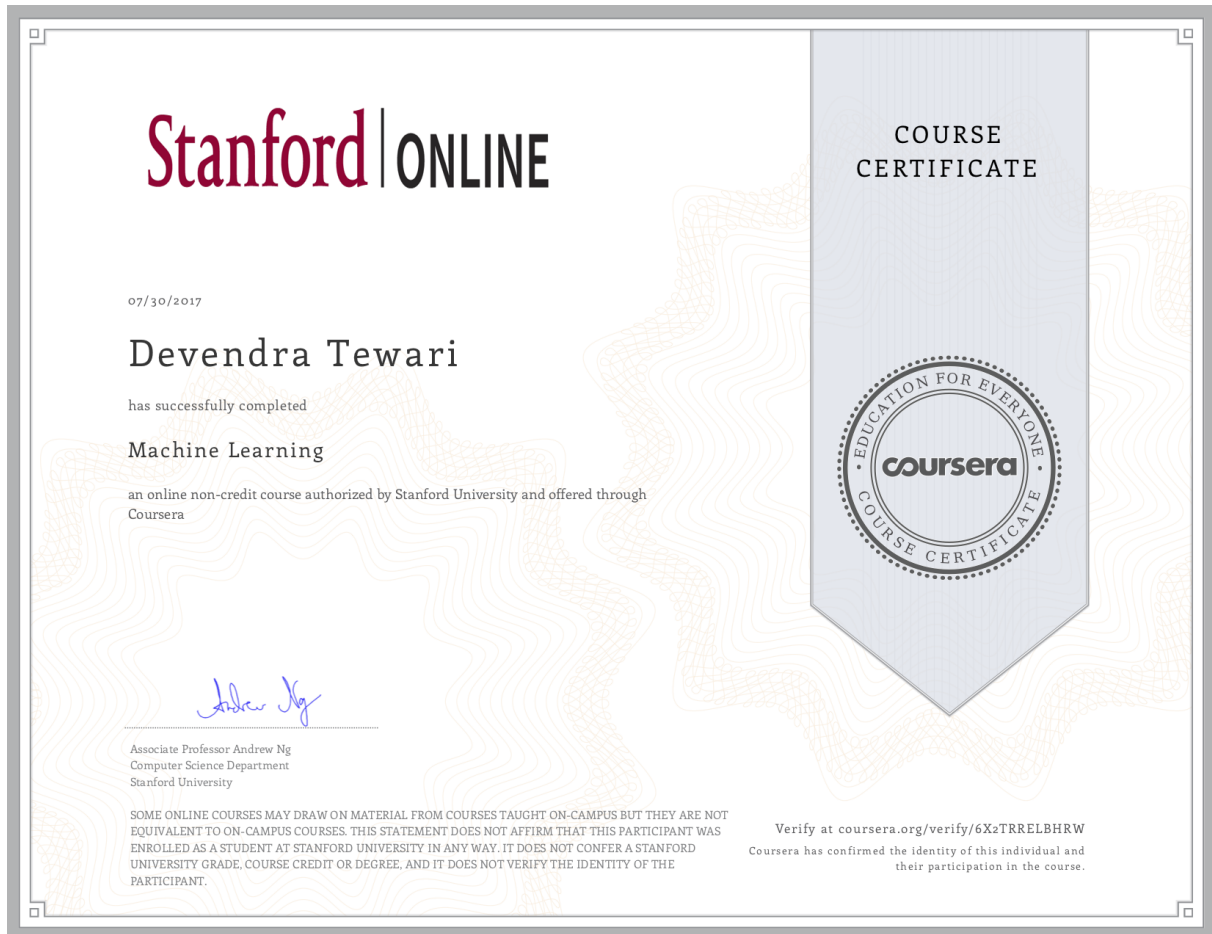
## 4 Attachments

### 4.1 Brazilian Portuguese Proficiency



**Figure 1:** Celpe-Bras Brazilian Portuguese Proficiency Certificate

## 4.2 Machine Learning



**Figure 2:** Machine Learning by Stanford University on Coursera

Follow link to see grade achieved.