

# Alisson Sol - Physicist, Software Engineer, General Manager



## Alisson Sol

Master of Science in Computer Science  
Cambridge General Management Certificate

Email: [email@AlissonSol.com](mailto:email@AlissonSol.com) Web site: [www.AlissonSol.com](http://www.AlissonSol.com)

### Fields of Interest

- Image Processing, Computer Vision, ERP, Big Data, Machine Learning, Distributed Systems, Security, Health, Finance

### Co-author of patent applications (10 USA patents granted, number in parenthesis)

- 2005/05/13 – Method and System for Document Assembly (2009/08/19: 7,577,906)
- 2005/05/18 – Flexible Data-Bound User Interfaces
- 2005/05/23 – System and Method for Integrated Management of Components of A Resource
- 2005/06/30 – Manipulation of Information Embedded in Content (2010/07/20: 7,761,924)
- 2005/07/05 – Metadata-Based Form Rendering and Write-Back
- 2007/01/12 – User Interface for Selecting Members from a Dimension
- 2007/02/28 – Rendering Database Queries with Blank Space (2009/11/10: 7,617,221)
- 2007/03/07 – Techniques to Manage Information for Dynamic Reports Using Time Periods for a Business Model (2012/08/07: 8,239,248)
- 2007/10/31 – Method for Capturing Design-time and Run-time Formulas Associated with a Cell (2012/12/25: 8,341,512)
- 2010/10/19 – Synthetic Gesture Trace Generator
- 2014/07/16 – Volatility-based classifier for security solutions (2016/11/01: 9,485,263)
- 2014/10/20 – Behavior Change Detection System for Services (2017/04/11: 9,619,648)
- 2015/03/30 – Testing Frequency Control using a Volatility Score (2018/02/27: 9,906,542)
- 2015/05/22 – Template Identification for Control of Testing (2017/08/01: 9,720,814)
- 2015/07/13 – Recognition of behavioural changes of online services
- 2016/06/29 – Scalable Computer Vulnerability Testing
- 2016/07/20 – Compliance Violation Detection (2021/06/21: 11,042,506B2)

### Microsoft Research Technology Transfer Awards

- 2008/07/25 – MSR AutoCollage 2008
- 2009/06/30 – MSR AutoCollage Touch '09
- 2011/08/11 – Mouse 2.0 Technologies
- 2012/02/01 – Multi Core Exemplar
- 2012/05/21 – ST Pipeline Refactoring (Skeleton Tracking)
- 2013/03/18 – Hand Grip Recognizer
- 2013/03/18 – KinectFusion

### Microsoft Gold Star Awards

- 2003/02/21 – Microsoft Business Solutions for work in the .NET Business Framework
- 2005/06/23 – Office Business Applications for contributions for both MS forecast project and Billg demo, as well as leading PerformancePoint Excel client subsystem
- 2008/12/05 – Microsoft Research for work in the Microsoft AutoCollage 2008
- 2009/12/04 – Microsoft Research for work in Microsoft Research AutoCollage Touch 2009 and other tech transfers

# Professional Experience

## Capital One

- Dec/2023 – Current: **VP of Software Engineering**
  - Managing the Endpoints & Automation Engineering team, in charge of physical, virtual, and mobile endpoints. Providing strategic guidance, architectural expertise, and program support to optimize processes, improve efficiency, and enhance key metrics in cybersecurity, privacy, accessibility, capacity, and edge AI deployment and compliance.

## Google

- May/2022 – Dec/2023: **Senior Engineering Manager**
  - Worked on Security Defense Platforms projects of the Privacy, Safety & Security group within Google Core Systems, managing Enterprise Protection Platform and Security Endpoint Agents teams in NYC, US, and Zurich, Switzerland.

## Microsoft Corporation

- Jan/2022 – Apr/2022: **Group Engineering Manager for M365 IC3**
  - Worked on Engineering Systems strategy, tools improvements, and process optimization.
- Nov/2020 – Jan/2022: **Group Engineering Manager for AI Frameworks**
  - Management of [ONNX runtime training](#), directing the compute acceleration, white-glove (model integration), and infrastructure (Python packages builds for <https://github.com/pytorch/ort> and security and compliance).
- Sep/2019 – Oct/2020: **Group Engineering Manager for M365 IC3**
  - Management of USA and Estonia teams for the Intelligent Conversation and Communication Cloud (IC3) real-time backend for Microsoft Teams, Skype, and Skype for Business. Improved DevOps team velocity for services in audio conferencing, live events, and applications (call recording, live captions, transcription, voicemail, and others). I established the calling, meetings, and PSTN data team and managed migrating services to Azure and scaling up to 100x during remote work and education expansion due to the 2020 pandemic.

## Amazon.com

- Feb/2019 – Aug/2019: **Senior Software Development Manager for Amazon WorkSpaces**
  - Manager of infrastructure teams for [WorkSpaces](#), a secure cloud desktop service from AWS that customers use to provision Windows or Linux desktops in just a few minutes and quickly scale to provide thousands of desktops to workers across the globe. Drove up manager satisfaction, job satisfaction, and teammates satisfaction. Used working backwards approach to align teams toward solving long-standing DevOps and customer problems, ranging from certificate key rotation to cost drill-down.
- July/2017 – Jan/2019: **Senior Software Development Manager for Dropship**
  - Managed online services for real-time inventory updates, processing customer orders, and integrating with transportation carriers for direct fulfillment at [Amazon.com](#). Made the connection of strategic annual business goals to quarterly and sprint plans. Through agile planning, achieved a reduction of technical debt while implementing new functionality, like adding support for the first new country stack in 9 years (India), public APIs, and new carrier integration. Software development teams moved data storage out of Oracle, while turnover went from 50% to 5%.
  - Managed business intelligence team in charge of metrics and reports optimizing development and operations for multibillion-dollar business shipping products directly from thousands of manufacturers and vendors to millions of customers. Maintained data quality during the move of data out of Oracle to multiple data stores.

## Microsoft Corporation

- 4 Gold Star Awards, 7 Microsoft Research Technology Transfer Awards, 17 patent applications (10 granted)
- May/2013 – June/2017: **Architect and Group Engineering Manager (AI+R Core)**
  - Engineering Manager for SPACE (Security, Privacy, Accessibility, and Capacity Engineering) team, supporting the AI Core group. Managing a team of engineers and penetration testers supporting horizontal and vertical applications like Bing, MSN, Cortana, and APIs. Development of request management, financial cost, and capacity modeling tools for millions of machines in multiple data centers.
  - Engineering Manager for AI Core Spartans group, a group of software engineers and data scientists working on special projects in the [Artificial Intelligence area](#), also expanded as an onboarding team for the organization.

- November/2011 – April/2013: **Engineering Lead for the Kinect for Windows team**
  - Recruited and managed the Computer Vision team for the [Kinect for Windows SDK](#), which shipped in 32 countries with over 500K downloads. Implemented a new machine learning module for [gesture recognition](#).
  - For Kinect for Windows v1.0, released on February 1st, 2012, participated in the position description and hiring of members for the development and test disciplines of the computer vision team. Aligned technology transfer with Xbox and Microsoft Research, transitioning the latest machine learning real-time processing results into production-quality code.
  - For Kinect for Windows v1.5, released on May 21st, 2012, managed verification and validation of skeletal tracking pipeline through internal toolset, and migration and release of “Kinect Studio”.
  - For Kinect for Windows v1.7, released on March 18th, 2013, managed the development of hand grip/release recognizer and tech transfer of [KinectFusion](#). Developed with interns the samples Kinect Bridge with OpenCV basics and Kinect Bridge with MATLAB basics.
  - Managed team starting the development of NUI (Natural User Interface) interactions for Xbox One.
- August/2010 – October/2011: **Knowledge Engineer for the Engineering Excellence team**
  - Worked on documenting and spreading best practices in the development discipline.
  - Instructor for training sessions presented to Microsoft engineers, including the “Agile development lab”, “Development at Microsoft for SDE I/II/Senior”, “Engineering at Microsoft”, and JavaScript classes.
  - Technical owner of internal training on Azure, SQL Azure, Html5, jQuery, and Silverlight.
- Feb/2007 – July/2010: **Development Manager for Microsoft Research Cambridge Innovation Development**
  - Hiring and management responsibilities and commitment to foster a results-driven environment characterized by curiosity, deep reflection, mutual challenge, and learning from others within and outside the team.
  - Quick evaluation of research results and incubation of those for transfer to product teams. Incubations include:
    - Gesture Mouse Experience Prototype (Microsoft [Touch Mouse](#))
    - Microsoft Research AutoCollage Touch 2009 application: First Microsoft Research project integrated with CEIP (Customer Experience Improvement Program), translated to 15 languages at initial release time.
    - Microsoft Research [AutoCollage 2008](#): First Microsoft Research project integrated with [Windows Update](#).
    - Worked with an external partner for the server-side development of a service to allow communication between a new device ([Wayve](#)) and mobile phone, using SMS and MMS messages.
    - Worked on the user interface components for trials of a new secure peer-to-peer technology ([Nimbus](#)).
    - Leader of a small team that converted an IPTV technology implementation from C# to C++ ([Pastry](#)).
- August/2004 – January/2007: **Development Lead for the Microsoft Office Business Applications team**
  - Development Lead for the Add-In for Excel, Reporting Wizard, and Samples subsystems for Microsoft Office [PerformancePoint Server 2007](#), a Business Intelligence solution allowing full performance management and scalable to entire corporations (with modules for forecast, monitoring, and business analytics). Defined an easily configurable data center deployment model, presented during the event “[The Rise and Rise of the Declarative Datacentre](#)”.
- April/2002 – July/2004: **Development Lead for Business Framework and Information Worker New Markets**
  - Participated in reviews and helped with architecture, design, and code reviews for several [solution accelerators](#). I was the manager and technical leader for the Microsoft Office Solution Accelerator for Proposals, composed of an Office client add-in, SharePoint site templates and webparts, and a dedicated web service.
  - I was the development lead for the user interface subsystem of the Microsoft Office [Information Bridge Framework](#) 1.0, including the task pane rendering inside Office applications, driven by backend web services. Leader for the initial tools effort for IBF v1.+, jumpstarting the offshore development by training the development team in Hyderabad, India.
  - I was the development lead for the Workflow user interface (in ASP.NET) of the [Business Framework](#). I convinced upper management of the need to rewrite the entire subsystem due to scalability and usability issues. With a better object-oriented architecture, that effort reduced the total lines of code by a factor of 10 (from around 30K LOC to ~3K LOC), with improved usability and accessibility.
- March/2000 – March/2002: **Individual Contributor for BizTalk and Application Center teams**
  - I was the leading developer of the BizTalk [Orchestration Designer](#) for BizTalk 2002 and did design and development for the integration of OD in Visual Studio for future versions. Developed specifications and implemented tests for the US-Commerce Latinum (BizTalk Orchestration Designer, XLANG parser, etc.).
  - Development of specifications and implementation of C++ tests for AppCenter reliability and timeliness.

### **CODEMIG - Information Technology Consultant**

- CODEMIG - Companhia Mineradora de Minas Gerais (<http://www.codemig.com.br/>)
- September/1994 – February/2000
- Activities: General advice on Information Technology subjects for the whole company; Writing of Technical and Legal projects and proclamations, etc.; Responsible for maintenance of company web site
- Consultant for all IT subjects for public mining company, including CAD (Computer-Aided Design), financial and HR systems.
- Main system development projects
  - Analysis, design and development of system for data entry, update and queries about company stockholder information;
  - Analysis, design and development of system to capture data from time clocks and calculate personnel work time;
  - Analysis, design and development of system for information maintenance about company third part contracts.
- Main technology implementation projects
  - Specification, installation and configuration of hardware and software for company connection to Internet;
  - Installation and configuration of Sun workstations, including hardware (printer, tape units, CD-ROM, etc.) and software (image processing systems) for geoprocessing applications.

### **Micro Universo - Systems Architect**

- Micro Universo Informática S/A (<http://www.microuniverso.com.br>)
- July/1995 - June/1999
- Activities: Systems Analysis and Design for ERP (Enterprise Resource Planning) system; Model design was done with Rational Rose and relational scheme was automatically generated from model using Visual BASIC Automation script. The resulting object-oriented model had more than 200 classes and 1200 attributes, with reuse factor of 5 (more than 1000 tables would be needed in a pure relational model).
- Main tools: Rational Rose, Centura Builder (ex-SQLWindows), Visual BASIC

### **Last One - Information Technology and Quality Management Consultant**

- Last One
- May/1998 – February/2000
- Activities: Specify, install and configure software for company Intranet and Internet site; Instructor for company Total Quality Management program
- Main tools: Microsoft Windows NT Server - Terminal Server Edition, Microsoft Proxy Server, Microsoft IIS, Microsoft Site Server - Commerce Edition, DCOM, Microsoft Transaction Server, Microsoft SQL Server, Microsoft Visual Studio
- Main projects: Analysis and Design of Internet video rental system from company Web site; Analysis, Design and Development of Intranet system for customer order tracking

### **IEF – MG - Information Technology Consultant**

- IEF-MG – Instituto Estadual de Florestas de Minas Gerais (<http://www.ief.mg.gov.br>)  
Winner of public competition 018/97 (Contract: 0101000697)
- July/1997 to December/1997
- Activities: Technical review of bought equipment and installation of software in Windows NT network for regional offices. Configuration of clients with Windows and Linux in 108 workstations for geoprocessing, 5 monitoring workstations, 13 workstation for foment system e 4 other workstations

### **ADM Control - Research and Development Manager**

- ADM Control Informática (Today part of RM Sistemas – <http://www.rm.com.br>)
- December/01/1993 to July/07/1995
- Activities: Programmers management and training; Analysis and design of a client/server system for Project Budget and Task control
- Main tools: Rational Rose, Microsoft Visual C++, Microsoft SQL Server, Watcom SQL Server

**COMIG - Systems Analyst**

- COMIG - Companhia Mineradora de Minas Gerais - Admission by Public Competition in 1st place
- June/03/1992 to January/13/1993
- Activities: Systems analysis and development; Administration of computer network
- Main tools: SunOS, Microsoft C/C++, ER Mapper, AutoCAD

**CREDIREAL - Systems Analyst**

- CREDIREAL Serviços Gerais e Construções S/A
- March/05/1992 to June/02/1993
- Activities: Information Technology Consultant

**EDIMINAS - Systems Analyst**

- EDIMINAS S/A (<http://www.hojeemdia.com.br>)
- January/01/1991 to November/30/1991
- Activities: Applications development for internal use; Installation and maintenance of the computer network for the “Hoje em Dia” newspaper; Author of the “Technology” column for the Computer Science page from July/1991 to February/1993

**Internship and academic assistance**

- DCC/UFMG - 2<sup>nd</sup> term 1991 - Post-Graduation teaching assistant: Numerical Calculus
- LCC/UFMG - Scientific Computation Lab. - November/1986 to July/1988 - Internship
- DCC/UFMG - March/1987 to December/1987 - Scientific scholarship - Project: Development of specialist system for linear algebraic equation systems resolution
- DCC/UFMG - May/1986 to December/1986 - Graduation teaching assistant: Numerical Calculus
- Chemical Dept./UFMG - March/1986 to August/1986 - Internship: Electronics Technician

## Curricular Education

### Cambridge General Management Certificate

- Cambridge Judge Business School, University of Cambridge, Cambridge, United Kingdom
- December/2009

### Doctoral Degree on Computer Science

- UFMG - Federal University of Minas Gerais, Belo Horizonte, MG, Brazil (<http://www.ufmg.br>)
- Area: Software Engineering, Digital Image Processing, Multimedia, Distributed Processing
- March/1993 – Unfinished - Proposed work: [metamodel for distributed multimedia processing](#)
- Approved in Qualification Exam

### Master's Degree on Computer Science

- UFMG - Federal University of Minas Gerais, Belo Horizonte, MG, Brazil (<http://www.ufmg.br>)
- Computer Science Department (<http://www.dcc.ufmg.br>)
- Area: Digital Image Processing, Software Engineering (<http://www.npdi.dcc.ufmg.br>)
- March/1990 to March /1993
- Dissertation: PhotoPix: an object-oriented framework for digital image processing systems

### Post Graduation studies on Electrical Engineering

- USP - University of São Paulo, São Paulo, SP, Brazil (<http://www.usp.br>)
- Area: Microeletronics
- August/1988 to December/1989

### Graduation on Physics, BSc

- UFMG - Federal University of Minas Gerais, Belo Horizonte, MG, Brazil (<http://www.fisica.ufmg.br>)
- March/1985 to July/1988

### Electronics Technician

- CEFET/MG - Federal Center for Technological Education of Minas Gerais, Belo Horizonte, MG, Brazil (<http://www.cefetmg.br>)
- From 1982 to 1984

## Extracurricular Education, Experiences and Professional Certification

**MCSE (Microsoft Certified Systems Engineer) ID: 1417594**

### Java Certification

- Sun Certified Programmer for the Java™ 2 Platform; Site Number: BR 16; Test: 310-025; Candidate ID: SP1837095; March/1999; Validation: <http://www.galton.com/~sun/>

### French Language Course

- FALE/UFGM - Faculty of Letters of UFGM, Belo Horizonte, MG, Brazil
- 240 hours - March/1993 to June/1995

### Student volunteer for “SIGGRAPH 93”

- Sponsor: ACM SIGGRAPH - Anaheim Convention Center, Anaheim, CA, USA
- August/01-05/1993

### English Language Course

- FALE/UFGM - Faculty of Letters of UFGM, Belo Horizonte, MG, Brazil
- 180 hours - August/1985 to November/1986

### Certificate of Proficiency in English

- The University of Michigan - English Language Institute, November 27, 1993

### ACM member – Association for Computing Machinery

- Member number: 4184479

## Main Published papers

### Protect Your Online Services with Big Data and Machine Learning

- Alisson Sol, Don Ankney, Eugene Bobukh
- MSDN Magazine
- January/2015

### PhotoPixJ: uma Plataforma para Processamento Digital de Imagens em Java

- A.C.R. de Almeida, A.A.S. Sol & A. de A. Araújo
- XI SIBGRAPI - Brazilian Symposium of Computer Graphics and Image Processing (In Portuguese)
- October/20-23/1998, Rio de Janeiro, RJ, Brazil

### A Metamodel for Distributed Multimedia Processing Systems Development

- A.A.S. Sol & A. de A. Araújo
- III Workshop of Thesis in Software Engineering of the XII SBES - Brazilian Symposium of Software Engineering
- October/13-16/1998, Maringá, PR, Brazil

### PhotoPixJ: Plataforma em Java para Implementação de Algoritmos de Processamento Digital de Imagens

- A.C.R. de Almeida, A.A.S. Sol & A. de A. Araújo
- XII SBES - Brazilian Symposium of Software Engineering (In Portuguese)
- October/13-16/1998, Maringá, PR, Brazil

### PhotoPixJ

- A.C.R. de Almeida, A.A.S. Sol & A. de A. Araújo
- Educational Software Session of IV WIE - Workshop of Computer Science in the School, during the XIX Congress of the SBC (Brazilian Computer Society)
- August/07/1998, Belo Horizonte, MG, Brazil

### PhotoPix: an Object-Oriented Framework for Digital Image Processing Systems

- A.A.S. Sol & A. de A. Araújo
- Image Analysis and Processing - 8th International Conference, ICIAP '95 San Remo, Italy, September/13-15/1995
- (Lecture Notices in Computer Science. Vol. 974, pp. 109-114, ISBN 3-540-60298-4, Springer-Verlag, 1995)

### PhotoPix: uma Plataforma para Sistemas de Processamento Digital de Imagens Orientada para Objetos

- A.A.S. Sol & A. de A. Araújo
- Proceedings of the VI SIBGRAPI - Brazilian Symposium of Computer Graphics and Image Processing (In Portuguese)
- Mar Hotel, Recife, PE, Brazil, October/19-22/1993, pp. 65-73

### PhotoPix: a Color Quantization System

- A.A.S. Sol & A. de A. Araújo
- Proceedings of the 1993 PCS'93 - Picture Coding Symposium, pp. 18.12-14
- Swiss Federal Institute of Technology, Lausanne, Switzerland, March/17-19/1993

### Extraction of Linear Geologic Structures from Remote Sensing Orbital Images

- A. de A. Araújo, B.S. Soares Filho & A.A.S. Sol
- Proceedings of the XVII Congress of the ISPRS - International Society for Photogrammetry and Remote Sensing
- Washington, DC, USA, vol. XXIX, Part B7, 1992, pp. 592-594



### **Otimização da Exploração Mineral com Uso de PDI e SGI na Plataforma SPARC**

- J. C. Christophe da Silva, C.R. Franca, A.A.S. Sol & C.T. Carvalho
- 5th National Seminar “The Computer and its Application in the Mineral Sector”, Proceedings... (In Portuguese)
- Belo Horizonte, MG, Brazil, August/17-19/1992

### **Geoexplo: Implantação de um SGI para Exploração Mineral**

- J. C. Christophe da Silva, C.R. Franca, A.A.S. Sol & C.T. Carvalho
- Brazilian Congress of Geology, Proceedings... (In Portuguese)
- São Paulo, SP, Brazil, 1992

### **Epitaxial Regrowth of Silicon on Sapphire by Rapid Isothermal Processing**

- R. Madarazo, A.G. Pedrine, A.A.S. Sol & V. Baranauskas
- SPIE's Technical Symposium on Microelectronic, Processing & Integration (SPIE - Society of Photo-Optical Instrumentation Engineers)
- Santa Clara Marriot Hotel, Santa Clara, CA, USA, October/03/1990

### **SIRINEL User Manual**

- Newton R. dos Santos & A.A.S. Sol
- Technical Report 009/1990 - DCC - ICEx - UFMG (Department of Computer Science of the Exact Sciences Institute of the Federal University of Minas Gerais), Belo Horizonte, MG, Brazil

### **Re-Epitaxia de Silício sobre Safira por Processamento Térmico Rápido**

- R. Madarazo, A.G. Pedrine, A.A.S. Sol & V. Baranauskas
- X CBRAVIC - Brazilian Congress of Applications for Vacuum in Industry and Science (In Portuguese)
- Technological Institute of the Aeronautics, São José dos Campos, SP, Brazil, July/26/1989

## Main Presented Courses

### Instructor for the Microsoft Engineering Excellence

- Course: “Engineering at Microsoft”, “Development at Microsoft for SDE I”, “Development at Microsoft for SDE II”, “Development at Microsoft for Senior SDEs”, “Javascript Fundamentals”, “Agile Development Lab in C#”, “Agile Development Lab in C++”.
- August/2010 to October/2011, 300+ hours

### Mini-course "XQuery and XPath"

- IX SBLP – Brazilian Symposium on Programming Languages
- May/24/2005, Recife, PE, Brazil, 3 hours

### Mini-course ".NET 2.0 Programming"

- IX SBLP – Brazilian Symposium on Programming Languages
- May/23/2005, Recife, PE, Brazil, 3 hours

### Mini-course "Introduction to the C# Language"

- VII SBLP – Brazilian Symposium on Programming Languages
- May/30/2003, Ouro Preto, MG, Brazil, 3 hours

### Mini-course "Introduction to the .NET Framework"

- VII SBLP – Brazilian Symposium on Programming Languages
- May/29/2003, Ouro Preto, MG, Brazil, 3 hours

### Administration of Windows NT Servers

- Catholic University of Minas Gerais
- May/23/1998 to June/06/1998, Institute of Computer Science of PUC Minas, 24 hours

### Instructor for the Extension Course in Systems Analysis of FUNDEP/UFMG

- Course: AS95-1; Disciplines: “Software Laboratory”, “Laboratory of Information Systems”, “Laboratory of Applications Development”, “Visual Development Environments I, II, III”
- April/05/1995 to November/09/1995, DCC/ICEx/UFMG, Belo Horizonte, MG, Brazil, 123 hours

### Software Development for the Windows Environment

- State University of Maringá - PET/CAPES
- December/14-16/1994, State University of Maringá, Maringá, PR, Brazil, 20 hours

### Laboratory of Applications Development

- Discipline for the Extension Course in Systems Analysis of FUNDEP/UFMG (AS 94-2) (FUNDEP - Foundation for the Research Development)
- November/07/ 1994 to December/01/1994, DCC/ICEx/UFMG, Belo Horizonte, MG, Brazil, 33 hours

### Mini-course “Programming for the Microsoft Windows Environment”

- 1st Computer Science Week of the UFV
- November/11/1993, Federal University of Viçosa, Viçosa, MG, Brazil, 6 hours

**Mini-course “Programming for the Microsoft Windows Environment”**

- XII JAI - Computer Science Update Journey, during the XIII Congress of the Brazilian Computer Society
- September/07-09/1993, Hotel Cambirela, Florianópolis, SC, Brazil, 6 hours

**Programming in the C/C++ Language for the Microsoft Windows Environment**

- FUNDEP - Foundation for the Research Development
- September/15/1992 to October/29/1992, DCC/ICEx/UFMG, Belo Horizonte, MG, Brazil, 60 hours

**Advanced Windows**

- FUNDEP - Foundation for the Research Development
- March/30/1992 to April/09/1992, DCC/ICEx/UFMG, Belo Horizonte, MG, Brazil, 24 hours

**Introduction to the Windows Graphical Interface**

- FUNDEP - Foundation for the Research Development
- November/26/1991 to December/17/1991, DCC/ICEx/UFMG, Belo Horizonte, MG, Brazil, 21 hours

**Introduction to VM/CMS**

- LCC/UFMG - Laboratory of Scientific Computation of UFMG
- Several occasions from November/1986 to July/1988, LCC/UFMG, Belo Horizonte, MG, Brazil, 20 hours

## Main Presented Lectures

### AI & Big Data Expo North America 2025

- Debugging Your AI Solution - [slides](#)
- Bad Data In, Years of Useless Analysis - then Purged - [slides](#)
  - June/04/2025, Santa Clara Convention Center, Santa Clara, CA, US

### DATAnalyze 2021

- Opening ceremony [presentation](#)
  - October/08/2021, Online

### AI circa 2018

- [Presentation](#) during event for The Boeing Company
  - Sep/24/2018, Bellevue, WA, USA

### Real-world Machine Learning: How Kinect Gesture Recognition Works

- Presentation during Windows Build 2013: [slides](#) + [video](#)
  - Jun/26/2013, San Francisco, CA, USA

### Computer Vision in the Kinect for Windows

- Part of tutorial “Towards Solving Real-World Vision Problems with RGB-D Cameras”, during [CVPR 2013](#)
  - Jun/23/2013, Portland, OR, USA
- Workshop of Industry Applications during XXV SIBGRAPI
  - Aug/24/2012, Ouro Preto, MG, Brazil

### Fundamentals of Distributed Systems Microsoft Engineering Excellence Forum 2011

- Fundamentals of Distributed Systems
- Cloud Security
  - Jun/08/2011, Redmond, WA, USA

### Pragmatic Security (in the cloud and on Earth)

- Microsoft Fargo Engineering Day 2011
  - May/03/2011, Fargo, ND, USA

### Reusing Your Knowledge (in Portuguese)

- Unicamp – Universidade Estadual de Campinas
  - March/30/2010, Campinas, São Paulo, Brazil
- Microsoft Brasil, for students of IME/USP – Mathematics and Statistics Institute/University of São Paulo
  - March/31/2010, São Paulo, SP, Brazil

### Debugging Your Mindset

- NxtGenUG Fest 09
  - June/12/2009, Cambridge, United Kingdom

### Doing Software in Large Software Companies

- NxtGenUG Event
  - March/17/2009, Cambridge, United Kingdom

### AutoCollage: The experience of going from a paper to a product

- Laboratoire d'Informatique de Paris 6
  - January/16/2009, Paris, France
- XXI SIBGRAPI - Brazilian Symposium of Computer Graphics and Image Processing – Invited Speaker
  - October/15/2008, Campo Grande, MS, Brazil
- IME/USP – Mathematics and Statistics Institute/University of São Paulo
  - October/14/2008, São Paulo, SP, Brazil

### **Tutorial “A Service-Oriented Application for an Enterprise Datacentre”**

- Research meeting “The Rise and Rise of the Declarative Datacentre”
  - May/12/2008, Cambridge, United Kingdom

### **Tutorial “Digital TV: The Software Components”**

- XX SIBGRAPI - Brazilian Symposium of Computer Graphics and Image Processing
  - October/07/2007, Belo Horizonte, MG, Brazil
- Centro Federal de Educação Tecnológica de São Paulo
  - October/05/2007, São Paulo, SP, Brazil
- Universidade Estácio de Sá
  - October/04/2007, Rio de Janeiro, RJ, Brazil

### **SBTVD and Microsoft TV Technologies**

- XIX SIBGRAPI - Brazilian Symposium of Computer Graphics and Image Processing
  - October/08/2006, Manaus, AM, Brazil

### **Applying academic knowledge in the Software Industry: caveats and comparisons between Brazil, USA and India**

- IX SBLP - Brazilian Symposium on Programming Languages
  - May/23/2005, Recife, PE, Brazil

### **Tutorial “Web Services and Implications in Software Development”**

- XVI SBES - Brazilian Symposium of Software Engineering
  - October/17/2002, Gramado, RS, Brazil, 3 hours

### **Tutorial “Development of Digital Image Processing Systems in the Java(tm) Language”**

- IX SIBGRAPI - Brazilian Symposium of Computer Graphics and Image Processing
  - October/29/1996, Caxambu, MG, Brazil, 4 hours

### **Programming in C++ for the Windows Environment**

- Cycle of Lectures in Computation
  - October/18/1994, Catholic University of Minas Gerais, Belo Horizonte, MG, Brazil

### **Distributed Processing in Windows NT**

- 1st Microsoft Solutions Seminar
  - December/13/ 1993, São Paulo, SP, Brazil

### **Porting Programs in C++/MFC to Windows NT**

- 1st Microsoft Solutions Seminar
  - December/13/ 1993, São Paulo, SP, Brazil

### **Introduction to C++ Programming for Windows**

- 3rd Microsoft Developers Seminar
  - May/12/1993, São Paulo, SP, Brazil

### **Tutorial “Programming for the Windows Environment”**

- V SIBGRAPI - Brazilian Symposium of Computer Graphics and Image Processing
  - November/09/1992, Águas de Lindóia, SP, Brazil, 6 hours

### **Introduction to C++ Programming using the MFC Library**

- 2nd Microsoft Developers Seminar
  - November/05/1992, São Paulo, SP, Brazil