

Alisson Sol - Physicist, Software Engineer, General Manager



Alisson Sol

Master of Science in Computer Science
Cambridge General Management Certificate

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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

- **VP of Software Engineering** (December/2023 – Present)
 - Recruited to manage the Endpoints & Automation Engineering team, in charge of computers, virtual desktops, and mobile devices. 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. Managed automation of the endpoint application control with [allow list enforcement](#), reducing median time to approve new applications from weeks to less than 6 hours.

Google

- **Senior Engineering Manager** (May 2022 – December 2023)
 - 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. Managed the deployment of endpoint applications and privileged access control for user-facing endpoints.

Microsoft Corporation

- **Group Engineering Manager for M365 IC3** (January/2022 – April/2022)
 - Worked on Engineering Systems strategy, tools improvements, and process optimization for the Microsoft Teams backend.
- **Group Engineering Manager for AI Frameworks** (November/2020 – January/2022)
 - Management of [ONNX runtime training](#), directing the compute acceleration, white-glove (model integration), and infrastructure for AI model training (Python packages builds for <https://github.com/pytorch/ort> and security and compliance).
- **Group Engineering Manager for M365 IC3** (September/2019 – October/2020)
 - Recruited back to Microsoft to manage 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 by 100x** during remote work and education expansion due to the 2020 pandemic.

Amazon.com

- **Senior Software Development Manager for Amazon WorkSpaces** (February/2019 – August/2019)
 - 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.
- **Senior Software Development Manager for Dropship** (July/2017 – January/2019)
 - I was recruited by a previous manager to join Amazon and assigned to manage online services for real-time inventory updates, order processing, and transportation integrations for [direct fulfillment](#). Connected 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 (Previous Tenure)

- 4 Gold Star Awards, 7 Microsoft Research Technology Transfer Awards, 17 patent applications (10 granted)
- **Architect and Group Engineering Manager (AI+R Core)** (May/2013 – June/2017)
 - 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.
- **Engineering Lead for the Kinect for Windows team** (November/2011 – April/2013)
 - Founding team member, 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.
- **Knowledge Engineer for the Engineering Excellence team** (August/2010 to October/2011)
 - Rotational role picked among experienced software engineers in the company to work 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.
- **Development Manager for Microsoft Research Cambridge Innovation Development** (February/2007 – July/2010)
 - Hiring and management responsibilities and commitment to fostering 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:
 - o Gesture Mouse Experience Prototype (Microsoft [Touch Mouse](#))
 - o 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.
 - o Microsoft Research [AutoCollage 2008](#): First Microsoft Research project integrated with [Windows Update](#).
 - o 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.
 - o Worked on the user interface components for trials of a new secure peer-to-peer technology ([Nimbus](#)).
 - o Leader of a small team that converted an IPTV technology implementation from C# to C++ ([Pastry](#)).
- **Individual Contributor and Development Lead for Microsoft teams in Redmond-WA** (March/2000 – January/2007)
 - 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](#)”.
 - 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.
 - 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 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.
 - Leading developer of the BizTalk [Orchestration Designer](#) for BizTalk 2002.

CODEMIG - Information Technology Consultant

- CODEMIG - Companhia Mineradora of 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 - 2nd 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/UFGM, Belo Horizonte, MG, Brazil, 60 hours

Advanced Windows

- FUNDEP - Foundation for the Research Development
- March/30/1992 to April/09/1992, DCC/ICEx/UFGM, 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/UFGM, Belo Horizonte, MG, Brazil, 21 hours

Introduction to VM/CMS

- LCC/UFGM - Laboratory of Scientific Computation of UFGM
- Several occasions from November/1986 to July/1988, LCC/UFGM, 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