Alisson Sol - Physicist, Software Engineer, General Manager

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Work Experience

Microsoft Corporation

- Sep/2019 – Current: **Group Engineering Manager (M365 IC3)**
  - Management of teams in USA and Estonia 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 the areas of audio conferencing, live events, and applications (call recording, live captions, transcription, voicemail, and others). Established the calling, meetings, and PSTN data team.

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 used 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 software teams in charge of online services for real-time inventory updates, processing customer orders and integration with transportation carriers for direct fulfillment business at Amazon.com. Made connection of strategic annual business goals to quarterly and sprint plans. Through agile planning, achieved significant reduction of technical debt while implementing new functionality, like adding support for first new country stack in 9 years (India), public APIs, and new carrier integration, all while moving data storage out of Oracle.
  - Manager for 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 move of data out of Oracle to multiple data stores.

Microsoft Corporation

- May/2013 – June/2017: **Architect** and **Group Engineering Manager (AI+R Core)**
  - Engineering Manager for the 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, and Cortana, and APIs (http://aka.ms/space-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 onboarding team for the organization.

- November/2011 – April/2013: **Engineering Lead for the Kinect for Windows team**
  - Recruited and managed Computer Vision team for the Kinect for Windows SDK, which shipped in 32 countries with over 500K downloads. Implemented new machine learning module for gesture recognition.
  - For Kinect for Windows v1.0, released on February 1st, 2012, participated on position description and hiring of members for development and test disciplines of the computer vision team. Aligned technology transfer with Xbox and Microsoft Research, transitioning latest machine learning real-time processing results into production-quality code, while maintaining existing codebase.
  - 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 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 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 team in Cambridge, UK**
  - Hiring and management responsibilities and commitment to foster a results-driven environment characterized by curiosity, depth 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). Managed the relationship with vendors to have the application translated to 15 languages at 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 both 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](#)).
- 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). As the leader of a team at times having 11 direct reports, I've demonstrated great accuracy estimating the team's components, despite dependencies across subsystems. Defined an easily configurable data center deployment model, presented during the Microsoft Research event "[The Rise and Rise of the Declarative Datacentre](#)".
- April/2003 – July/2004: **Development Lead for the Information Worker New Markets team**
  - Development Lead for the Microsoft Office Solution Accelerator for Proposals
    I was the development lead of this solution accelerator with an Office client add-in, SharePoint site templates and webparts, and a dedicated web service. Participated in reviews and helped with architecture, design and code reviews for several [solution accelerators](#).
  - Development Lead for the Microsoft Office [Information Bridge Framework](#)
    I was the development lead for the user interface subsystem of IBF 1.0, including the task pane rendering inside Office applications, driven by backend web services. Lead initial effort of the Tools for IBF v1.+, traveling to jumpstart the offshore development by training the development team in Hyderabad, India.
- April/2002 – March/2003: **Development Lead for the Microsoft Business Framework**
  - I was the development lead for the Workflow user interface (in ASP.NET) of the [Business Framework](#). After starting to lead a subsystem that was considered to be feature complete but had severe usability gaps, I've convinced upper management of the need to rewrite the entire subsystem with a better object-oriented architecture, what reduced the total lines of code by a factor of 10 (from around 30K LOC to ~3K LOC), with improved usability. Received a gold star award for the significant contribution to the success of this project.
- March/2000 – March/2002: **Individual Contributor for BizTalk and Application Center teams**
  - I was the main developer of the BizTalk [Orchestration Designer](#) for BizTalk 2002, and also did design and development for integration of OD in VS.NET for future versions.
  - Development of specifications and implementation of programs to test the product US-Commerce Latinum (BizTalk Orchestration Designer, XLANG parser, etc.).
  - Development of specifications and implementation of C++ tests for the reliability and timeliness subsystem.

Main Previous Work Experience

- Co-founder of 3 startup companies in the areas of software, hardware and IT consulting.
- Co-author of several patent applications (9 USA patents granted).

Education

2009:   General Management Certificate from the Judge Business School, Cambridge University, UK
1997:   Qualified for doctoral degree at UFMG – Proposed work: [metamodel for distributed multimedia processing](#)
1993:   M. Sc. Degree in Computer Science at UFMG: [PhotoPix](#): Framework for Digital Image Processing Systems
1990:   Post Graduation studies in Electrical Engineering (Microelectronics) at USP
1988:   B. Sc. Degree in Physics at UFMG (Federal University of Minas Gerais)