

## Andres Ixim Sebastian Oliva Casado

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Guatemala City, Guatemala

Statement	Software generalist inspired in building solutions that deliver social impact. Specific interests in graphics, large scale data analysis and user experience focused development.
Languages	<b>Primary</b> Python, Java, JavaScript <b>Others</b> C/C++, SQL, PHP, Ruby, C#, TeX, R
Universitary Education	<i>Undergraduate Student</i> , Sciences and Systems Engineering <i>Undergraduate Student</i> , Applied Physics Universidad de San Carlos de Guatemala, Finished curricula for Sciences and Systems Engineering, 2017
Projects and Experience	<div><div><i>Trainer</i></div><div><b>Courses throught 2019 - 2021</b></div><div>Open Training. – Guatemala Courses on Python Programming, Web Development and Data Analysis.<ul style="list-style-type: none"><li>• Introduction to Python. Python Web Development and Databases. Data Analytics and Visualization with Python.</li><li>• Small Class sizes with personal attention.</li><li>• Course contents available online.</li><li>• Python, Django, Javascript Frameworks, MySQL, SQLite, Pandas, DevOps Practices, Design and Modeling</li></ul></div></div> <div><div><i>Tech Analyst</i> Derechos Digitales (organizacion civil)</div><div><b>Oct. 2020 - April 2021</b></div><div>Tech for non-governmental organization based in Santiago, Chile. Creation of custom software. Technical Support. Training and follow up with fellow organizations. Webmaster tasks. Technical Writing. Internal Security Policy.<ul style="list-style-type: none"><li>• Technical Support: Implementation of security protocols and response plans. Assistance to members with varying technical skill levels.</li><li>• Devops: Ansible deployment scripts. Backup and deployment procedures.</li><li>• Web development: Wordpress site development, securing of publicly accessible web servers. Load Balancing. Design and Layout implementation.</li><li>• Custom Software development for statistical analysis of online political discourse. Exploratory data dashboards with Pandas and interactive JavaScript</li><li>• Linux, Windows, Mac OS, Wordpress, MySQL, SQLite, Python, Generalist IT Support, Servers and administration.</li></ul></div></div> <div><div><i>Tech Lead</i> Afinidata</div><div><b>2019 - April 2020</b></div><div>Lead Developer for a parental early stimulation chatbot. Creation of APIs, fixes and building features, continous integration, QA and deployment processes. ETL and Data Analysis.<ul style="list-style-type: none"><li>• Testing frameworks, reducing code quality incidents, code coverage from 0 to 80%.</li><li>• Devops: Re-deployment across AWS cloud. Ansible deployment scripts. Database recovery.</li></ul></div></div>

- Data engineering: homogenization of inputs, creation of inner feedback and introduced collection of several user events.
- Data analysis: aide in creation of ML recommendation engine, creation of dashboards, user cohort analysis and status indicators. Metrics, success rates and gamification analysis.
- Python, Django, MySQL, Linux, AWS EC2, AWS RDS, Travis CI, SQLite, Chatfuel

*Provider* Consorcio Observatorio Electoral Guatemala / NDI **January - August 2019**

Data collection system for events related to the electoral event, candidates and observation.

Metrics on political ads, unfair or unlawful mass media use, threats or violence, unregistered rallies, etc.

- Large scale storage of complex sample instruments.
- Training and support to over 300 volunteer observers.
- Backup, recovery protocols, service maintenance and security support.
- Data cleanup and quality validation.
- ODK - Ona, PostgreSQL, Jupyter, Pandas, Linux, Docker Compose

*Tech Lead* Nómada – Guatemala

**2018**

Tech and strategy for Nómada, an independent progressive online journal.

- Development of a tech strategy fit for independent media.
- Frontend web development.
- Performance and accesibility optimization for web.
- Design and implementation of a digital security policy for high-value and high-risk targets.
- Web, Wordpress, Javascript, MySQL, Python, D3.js

*Technical and Publisher Support* Open Contracting

**January - September 2018**

Iniciativa Latinoamericana por los Datos Abiertos / OCP

Technical support for publishers of Open Contracting Data Standard documents on public procurement.

- Supporting publisher's needs related to the standard.
- Validation and analysis of published data in the OCDS.
- Design and implementation of tools for extraction, storage, processing and analysis of OCDS data.
- Reporting on validation status for publishers and support on suggesting ways to improve data publication quality.
- JSON, JSON Schema, Python, PostgreSQL, Google Big Query

*Fellow* School of Data

**2017**

School of Data / Open Knowledge Foundation

Aide in data awareness, education and data driven decisions for activists, journalists and social agents.

- Collaboration with multiple stakeholders on building software platforms for social impact.
- Support for projects related to the Open Contracting standard.
- Assisting on creating the national curricula on basic data education for state institutions.
- Jupyter Notebooks, Python, Neo4J, SQLite, Spreadsheets, Design Thinking, User Oriented Design, Hy

	<p><i>Senior Software Engineer</i> <span style="float: right;"><b>January - September 2016</b></span>  Startrack S.A.  Software for commercial GPS tracking</p> <ul style="list-style-type: none"> <li>• High concurrency processing, network sockets, database integration, migration to microservices.</li> <li>• Testing, packaging, deployments and build processes, and documenting.</li> <li>• Large scale database deployments management (15 DBs, 20-100 GB).</li> <li>• Java, PostgreSQL, Python, Kotlin, Shell</li> </ul>	
	<p><i>Student Developer, Google Summer of Code</i> <span style="float: right;"><b>2014, 2015</b></span>  FOSS ASIA / FashionTec – Google Inc.  Software for Knitting Machines - Knitapps, Knitlib, AYAB GUI</p> <ul style="list-style-type: none"> <li>• Implementation of protocols and a library for controlling knitting machines.</li> <li>• API design for several clients (Web, Python library) and devices.</li> <li>• Asynchronous Serial communication, packaging, testing and documenting.</li> <li>• User Interface / User Experience.</li> <li>• Python, JavaScript, WebSockets, Arduino, PyQt</li> </ul>	
	<p><i>Teaching Assistant, Ad Honorem</i> <span style="float: right;"><b>2014, First Semester 2015</b></span>  Universidad de San Carlos de Guatemala – Engineering Faculty.</p> <ul style="list-style-type: none"> <li>• <i>Operating Systems 2 (2014, 2015)</i>: Introduction to Linux kernel, kernel module development, system calls, virtualization, remote process execution. <i>C, Git</i></li> <li>• <i>Algorithms and Data Structures (2015)</i>: Algorithmic complexity, Sets, Lists, Dictionaries, Trees (binary, auto balancing, b-trees). <i>Java, C</i></li> </ul>	
	<p><i>Freelance Software Developer / Project Manager</i> <span style="float: right;"><b>February - May 2014</b></span></p> <ul style="list-style-type: none"> <li>• Multinational ad campaign tie-in card game (80 000+ users)</li> <li>• Team lead, Programmer, SysAdmin</li> <li>• Java, Play Framework, Scala, OAuth Authentication, MySQL</li> </ul>	
	<p><i>Software Engineer</i> <span style="float: right;"><b>January 2013 - December 2013</b></span>  4 Acertijos – Guatemala City.</p> <ul style="list-style-type: none"> <li>• <i>Systems Architect, Data Analysis</i>  Software for enterprise vending workflow analytics and optimization.</li> <li>• <i>Team and Project Management</i>  Managed the development of a multiplatform mobile real estate sales app.</li> <li>• Roles as salesperson, exhibit spotter, photographer, Glass explorer, etc.</li> <li>• Responsive Web Development, HTML 5, Android, Python, .NET MVC 4.</li> </ul>	
	<p><i>Software Engineering Intern</i> <span style="float: right;"><b>June - September 2012</b></span>  Google Inc.  App Engine – San Francisco.</p> <ul style="list-style-type: none"> <li>• Python, App Engine Datastore, SQLite.</li> <li>• Distributed Systems, Non-relational storage.</li> <li>• Learnt automated Build Tools, testing, code craftsmanship.</li> </ul>	
Projects and Experience (cont.)	<p><i>Student Developer, Google Summer of Code</i> <span style="float: right;"><b>2011</b></span>  openSUSE project – Google Inc.  Taxi - an online ICC color profile calibrations sharing webservice.</p> <ul style="list-style-type: none"> <li>• Python, MongoDB, Werkzeug - WSGI, JavaScript</li> <li>• Collaboration with the OpenICC group on colour management techniques.</li> <li>• Emphasis on non-blocking, parallel dispatch of binary profiles.</li> <li>• Presented in Nuremberg, Germany, for the openSUSE Conference 2011</li> </ul>	

	<p><i>Developer</i> <b>2010+</b></p> <p>Shoebot: Free Software (Python/Cairo based) drawing bot</p> <ul style="list-style-type: none"> <li>• Python, PyGTK, PyCairo, Pango, PIL</li> <li>• Implemented typographic support, bugfixes, style, docs, etc.</li> </ul>
	<p><i>Webmaster</i> <b>2009-2011</b></p> <p>InGame Magazine - Promedia Editorial: Pioneering videogame magazine in Latam.</p> <ul style="list-style-type: none"> <li>• Website, Forum management</li> <li>• jQuery, PHP, MySQL, Wordpress.</li> <li>• Wrote and published articles on printed media, video.</li> </ul>
Contests and Awards	<p><i>Chispa</i> <b>March 2015</b></p> <p>Buenos Aires, Argentina</p> <p>First Prize: Desarrollando America Latina 2014</p> <p>On-site incubation for two weeks on Social Entrepreneurship.</p> <p>Design Thinking, Solution-based design. Tech as a change agent for society.</p> <p><i>Space Apps Challenge</i> <b>2014</b></p> <p>Guatemala City, Guatemala</p> <p>Project: Urban Data</p> <p>Award: Global Award Finalist, First Place Local Award</p>
Courses and training	<p><i>Low Cost Solutions for Wireless Connectivity</i> <b>November 2011</b></p> <p>International Centre for Theoretical Physics (ICTP), TWAS</p> <p>Guatemala, Guatemala</p> <p>Training on implementation of Low Cost Networking in the developing world.</p> <p>Wireless Networking and internet access, IPv6, antennas and radio physics theory.</p> <p><i>Mathematical School of Latin America and the Caribbean (EMALCA)</i> <b>May-June 2011</b></p> <p>Unión Matemática de América Latina y el Caribe Latin America (UMALCA), Centre International de Mathématiques Pures et Appliquées (CIMPA), International Mathematical Union (IMU)</p> <p>San Salvador, El Salvador</p> <p>Courses on Introduction of Dynamical and Chaotic Systems, Markov Chains, and Numerical Methods for the evaluation of PDE.</p>
Activities and Hobbies	<p>Free Software supporter.</p> <p>Digital and Analog Photography.</p> <p>Graphic Design and Typography aficionado.</p> <p>Basic knowledge in xilography, engraving, woodcarving and metalworking.</p> <p>Scientific Glass blowing.</p>