ISAAC MISAEL OLGUÍN NOLASCO

M.SC. INFORMATICS STUDENT
COMPUTER SCIENCE ENGINEER

CONTACT ME AT

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SKILLS SUMMARY

- Software Development
- Database Development and Management
- Requirement analysis
- Systems' design
- Process Improvement
- Teamwork and time management

COMMUNICATION SKILLS

●●●●● Spanish 🇪🇸

●●●●○ English 🇬🇧

●●●○○ German 🇩🇪

MAIN TECHNOLOGICAL SKILLS

- Java, C, Python, PyTorch
- PostgreSQL, Sybase, MySQL, MongoDB
- Linux

INTERESTS

Security, NLP, Artificial Intelligence, Deep Learning, Criptography, Parallel Computing, Quantum Computing, Web Development, Hiking, Films, Volleyball, Photography, Running

PERSONAL PROFILE

I am a Master's student and CS engineer with holistic knowledge of software development. I have experience in real-time systems and full-stack development in the banking sector. My current area of interest is focus on NLP and Security.

WORK EXPERIENCE

Werkstudent

Siemens Advanta Consulting | April 2022 - Present

Cybersecurity consultant.
Collaboration in the analysis, design, development, and assessment of the app that allows gathering information for the security analysis and the requirements' fulfillment of the Zero Trust Project; as well as the implementation of projects related to Data Mining.

Systems analyst

Bank of Mexico (Central Bank) | Dec 2015 - Oct 2020

- Analyst and programmer of the Foreign Currency Systems Development Office
- Collaboration in the analysis, design, and development of:
  - the Interbanking Payment System (SPID®). It allows organizations to make real-time transferences with US dollars in the Mexican territory. I was in charge of the development and maintenance of the DB, monitor's interface, and server applications that give users the possibility to obtain transfer confirmations.
  - the Clearing Houses System. It was designed to provide clearing and settlement of interbank documents, including checks, electronic funds transfers, direct debit operations, and interbank cash operations. I took part in the maintenance and upgrade of the whole system.
  - the Funds Transfer System from the USA to Mexico. It is is a service to send money from an account in a financial institution subscribed to the service in the United States to an account in any participant Mexico. I helped in the maintenance of the system and its communication with the correspondent application of the Federal Reserved in the US.
  - the "Know your Customer's Customer" System. It is designed to process and deliver information that aims to help financial inclusion for sustainable access into the financial market. It considers the responsibility of the central bank against money laundering and combating terrorism. I helped to develop the first version of the WebApp that people and organizations/companies will use to access their information.
  - the Mexican Real-time Gross Settlement (SPEI®). My responsibilities relied on the upgrade of the monitor and its components that users use to operate and control the system.

Achievements:
Most of the systems required the commitment of my team to deliver them according to reduced times. So far they are resilient, stable, and were always delivered before the deadline.
I was in charge of the development of the DB that is used to store all transferences of the SPID system and solved requests from clients in very short periods of time that in general would have taken days to be solved.

Internship
Bank of Mexico (Central Bank) | Jun 2015 - Dec 2015

Analysis and programming of the web application regarding the Clearing House System. The system was upgraded to its web version and improved the user experience. Besides new cryptographic libraries were embedded to enhance its security.

Achievements:
- After three months of the beginning of my internship, I got an offer for a Software developer position in the central bank.
- I was hired by the central bank immediately after the end of my internship.

EDUCATIONAL HISTORY

Technische Universität München, Germany
Masters in Informatik | Oct 2020 - Present

Focus areas: ML and Analytics, Security and Privacy; and Scientific Computing and High Computing Performance

Interdisciplinary Project in collaboration with the TUM School of Governance (October 2022 - Present)
Title: Automated trauma detection in genocide court transcripts

Lectures that I have already taken or am taking during the winter semester 2022-2023:
- Network Security, Networks for Monetary Transactions, Security Engineering; and Machine Learning and IT-Security
- Parallel Programming and Introduction to Quantum Computing
- Introduction to Deep Learning, Legal Data Science and Informatics; and Natural Language Processing
- Techniques in Artificial Intelligence
- Seminars: (In)Security of Online Voting Systems & JavaScript Technology
- Praktikums: Advanced Programming Systems in C & Legal Data Analysis Lab

Instituto Politécnico Nacional, Mexico / Universidad Politécnica de Madrid, Spain
B. Computer Science | Jul 2011 - Dec 2015

GPA: 3 (American grade) | 2.0 (German grade)
Computer Science
Thesis topic: Quantum computing and its impact on digital signature schemes.
Exchange semester (August 2014 - February 2015) at the UPM in Madrid Spain.