Yarib Israel Nevarez Esparza
Life and Educational Path

December 2, 2023

Early Life and Education

- **Birthplace:** Durango City, northern Mexico.
- **Early interests:** Passion for electronics and mathematics since childhood; curiosity led to building electronic circuits.
- **Secondary School (1998-2001):** Participation winning in electronics creativity contests.
- **High school (2001-2004):** Majored as a technician in electronics, won multiple contests in mathematics, physics, and electronics.
- **Hobbies:** Building electronic circuits and computer programming with C/C++.

University Education

- **Bachelor's degree (2004-2008):** Electronics at Durango Institute of Technology. Continued success winning in academic contests across various subjects (mathematics, physics, electronics, and creativity).
- **Leadership roles:** Vice president of the IEEE student branch; represented the institute in Latin-American student leader conferences.
- **Hobbies:** Continued interest in C/C++ programming, focusing on microcontrollers.

Professional Career

- **Initial career (2009):** Embedded software engineer at Texas Instruments in Aguascalientes, Mexico. Developed software for graphics calculators and advanced to a senior engineer position in short time (two and a half years).
- **Further career moves:** Positions in IBM, Continental Automotive, and Toshiba in Guadalajara City, Mexico.

Advanced Studies and Career in Germany

- **Master of Science in Embedded Systems Design (2016):** After one semester at the Technical University of Jena, Germany; transitioned to Embedded Systems Design at the Technical University of Bremerhaven.
- **Industry experience:** Master thesis intern at E.I.S. Electronics GmbH, developing an FPGA-based controller system for airplanes.
- **Doctoral studies (started May 2019):** At the University of Bremen's Institute for Theoretical Electrical Engineering and Microelectronics (ITEM) under Prof. Dr.-Ing. Alberto García-Ortiz.
- **Research focus:** Investigating neural network accelerators for low-power embedded systems. Funded by CONACYT.

Current Status

- **Post-Doctoral researcher (started June 2022):** Working at NXP Semiconductors in the Netherlands on a Long Term Innovation project in the CTO division.
- **Research area:** Strong neural network quantization, custom floating-point computation, and novel on-device learning approaches for resource-constrained embedded applications (tinyML).