Campos Lopez Maximiliano

Bionic Engineer / System Engineer/ Ph. D Student

Profile

I am a 27 year engineer, graduated in bionic engineering, with interest in programming subjects such as image processing, artificial intelligence, and robotics, as well as medical instrumentation; doing a PhD in Nanoscience's and nanotechnologies to broaden my horizons of knowledge, open to new opportunities to grow as a person, and thus perform better in the industry. I like games, musical instruments, swimming and bodybuilding.

EDUCATION

- **Bionic Engineering**
  - UPIITA – IPN
  - Aug 2015 – Jun 2020
- **Doctorate in Nanoscience's and nanotechnology**
  - ENCB - IPN
  - Aug 2020-present"

EXPERIENCE

Internships at Hospital

Aug 2018 / Aug 2019 Zacatecas

I spent my internship at the hospital where I learned how to diagnose equipment, and how to fix equipment, social skills such as communication, and to see how maintenance work was done on certain equipment.

SNI researcher assistant

Jan 2019 / Dec 2022 CDMX

Participant in the research projects of different Ph. in the SNI researcher assistant program by the CONACYT with Dr. Juan Méndez Méndez and Dr. José Jorge Chanona Pérez

Repairing equipment

Jan, 2021~Dec 2022

IPN

During my doctoral stay, I worked repairing laboratory equipment as well as computer equipment, as I have basic knowledge in electronics. This helped me to develop diagnostic skills for Computer Systems.

CONTACT

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SOFT SKILLS

- Capacity for leadership and decision making.
- Assertive communication and teamwork.
- Problem Solving
- High adaptability.
- Capability to work under pressure.
- Self Motivate
- Lifelong Learning

HARD SKILLS

- Programming languages such as: Python, C, C++, C #, MATLAB , and SQL.

Image processing: OpenCV and Pillow.

- App design with APP Inventor, and python.
- Electronic design (Eagle).

Microcontrollers programming (Pickit 3 MPLAB)

- CAD design and simulation (SolidWorks)

Knowledge in 3D printing (Voxelizer 3).

- Use of lathe, milling machine.

LANGUAGES

Spanish – Native

English – B1 -TOEFL ITPS

Japanese – N5

German - Learning

EXPERIENCE

JAM participant

Nov, 2022~ Dec,2022

CDMX

Participant in latix in gaming in a JAM with my team, where our skills and abilities were tested in the creation of a game, under pressure within 1 month, where we worked quickly and efficiently to deliver a game with established goals. Where I further developed my teamwork and communication skills.(https://ro-baca.itch.io)

JAM participant

Feb, 03~05, 2023

CDMX

Participate in the Global Game Jam 2023. As part of a team to make a game in less than 48 hours, which involves working under pressure, to submit a game that must be functional, appealing, simple to understand, and in accordance with the established theme, with the least possible errors.

University professor

May, 08-2023~Sep 2024

CDMX

Professor at the ICEL University, for Manufacturing and Robotics Engineering. Where i impart subjects from the last semesters such as microcontrollers, sensors and actuators, and programming of robots, among others since January 2024 i became the head of the robotics academy.

Course Teacher for bachelor's degree Applicants.

Feb, 24-2024~May,25-2024, Feb, 18-2025~May,31-2025, Saturdays

CDMX -UPIITA IPN

Professor of the physics course for new applicants to the IPN bachelor's degrees.

University professor (UACM)

Ago, 12-2024~Dic,25-2024

CDMX -UACM Cuauthepec

Professor at the Autonomous University of Mexico City, in the area of Mathematics Engineering. Where I teach subjects in the field of mathematics such as Calculus and Statistics.

University professor (TECMILENIO)

Ago, 12-2024~Dic,25-2024

CDMX -TECmilenio Ferreria

Professor at Tecmilenio University. Where I teach the subject of Robotics for the last semester of Mechatronics Engineering Robotics.

Courses, diplomas and seminars

- 10X Genomics Deconstructing glioblastoma heterogeneity to develop new treatments.
- ¿Sesión EMERALD IPN Porque activar mi perfil? TOC? *
- Como publicar y el uso de IOP para el IPN. *
- Springer Link para el IPN. *
- SN Experiments y Nano para el IPN. *
- Capacitación Wiley Online Library para el IPN.*
- Los nuevos desafíos de la gestión integrada del agua en cuencas endorreicas. *
- Cuartos limpios y Desarrollo de dispositivos de película Delgada. *
- Técnicas e Infraestructura de laboratorio de espectrometría de MASAS(LEM) del CNMN.*
- Herramientas moleculares y sus aplicaciones en micro y nanotecnologías. *
- Importancia de la preparación de muestras para microscopia electrónica de Barrido en el área de biología. *
- Caracterización Micro y nano mecánica de materiales basada en pruebas de indentación. *
- Preparación de muestras para microscopia electrónica de barrido y microanálisis de rayos X. *
- Aplicaciones Comunes en Ciencia y tecnología del Microscopio electrónico de barrido de alta resolución. *
- Espectroscopia de fotoelectrones inducidos por Rayos X(XPS): Nociones y un caso de estudio. *
- Micro y nanolitografía. *
- Redes Neuronales Artificiales en MATLAB *
- Curso: Aulas de colaboración, evaluación a través de Microsoft Teams. *

Publications

- MODELO PREDICTIVO PARA DETERMINAR LAS FIRMEZAS DE LAS MANZANAS BADADO EN UN ESTUDIO ESTRUCTURAL, FISICOQUIMICO Y NANOMECANICO DE CUATRO VARIEDADES DE MANZANAS
- CLSM and TIRF images from lignocellulosic materials: garlic skin and agave fibers study. https://jglobal.jst.go.jp/en/detail?JGLOBAL_ID=202102221923636965
- Development of a facile aerogel-based ion-selective electrode using cellulose and carbon nanotubes as transducer materials for potentiometric application. https://doi.org/10.1002/app.53891
- A Comprehensive Review of Silver and Gold Nanoparticles as Effective Antibacterial Agents. https://doi.org/10.3390/ph17091134
- Advancing Microplastic Detection Technology through Digital Image Processing, Fractal Analysis, and Polynomial Approximation Methods https://doi.org/10.1093/mam/ozae044.195