NIKOS CHRYSOGELOS

Electrical and Computer Engineer

📅 **10 March 1990**   @ **nkchrys@gmail.com**   📞 **+41 76 687 76 94**
in **Nikos**   📍 **Zürich, Switzerland**   **nkchrys**   **Nikos' web**

WORK EXPERIENCE

Anybotics — Electrical Engineer

📅 Jun 2024 – Ongoing   📍 Zürich, CH

- **Senior engineer** in the latest product iteration: custom GPU motherboard design (PCIe, USB 3, GMSL)
- **Expert engineer** in EMC testing
- **Lead engineer** in wireless topics (Wi-Fi, Cellular, RF antenna design)

Fotokite — Electrical Engineer

📅 Jan 2018 – April 2024   📍 Zürich, CH

- Scaled up production from 10 to 300 yearly in USA and Europe. Designed and deployed test adapters, software infrastructure, and established communications with contract manufacturers.
- From prototype to **CE and FCC certifications** by developing in-house EMC lab to iterate faster and improving the electrical design accordingly
- **Expert engineer** in power electronics design and Power Line Communication
- **Lead engineer** in camera, WiFi and GPU modules integrated designs
- Hands-on hardware testing, debugging, soldering, fast prototyping, and firmware development

ABB, CRC — Power Electronics Engineer

📅 Sep 2016 – Feb 2017   📍 Baden, CH

Analysis and comparison of **control algorithms** for **grid-connected power converters**.

ETH Zürich — Research Assistant

📅 May 2016 – Sep 2016   📍 Zürich, CH

Development of an efficient **DC micro-grid** for a lighting installation.

CERN — Electronics Engineer

📅 Feb 2013 – Apr 2014   📍 Geneva, CH

Designing and developing **control systems** and **wireless sensor network** for the new cooling plant of the CMS experiment using PLC and AVRs.

JOB PHILOSOPHY

Passionate about **revolutionary** hardware and **human-centered** products. Excited to be working with inspired and motivated colleagues who are ready to create **meaningful** and **sustainable** innovation.

FAVOURITE PROJECTS

Orama
Most innovative idea in PowerUp!2019 organized by EIT InnoEnergy, Greece. Data analytics for load forecasting in neighborhood-level electricity grid.

SolarBites
Electric cooking for refugee camps using solar panels and flexible PCBAs, Hackathon 2019, Cern.

STRENGTHS

Altium Designer · Manufacturing · EMC design · Power systems · Digital electronics · High speed design · Power electronics · Resonant converters · Battery management · Ethernet · WiFi · Power Line Communication · MIPI · CAN · PCI · USB · Flex PCBA

Linux · Matlab · Simulations · Python · Git · PLC-Siemens · Simatic S7 · Atmel studio · Drones · ARM Cortex-M · Firmware · C · C++ · PHP · CSS

Energy data analytics · Smart meters

Jira · Notion · Confluence · Wrike · Scrum

LANGUAGES

English	●●●●●
French	●●●●○
German	●●●○○
Spanish	●●●○○
Portuguese	●●○○○
Greek	●●●●●
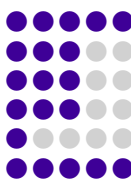
EDUCATION AND PUBLICATIONS

ETH Zürich MSc - Power electronics and energy systems

📅 Sep 2015 – Sep 2017   📍 Zurich, CH   5.6/6

- "An 380V / 48V, 1.5 kW Partial-Power Precontrolled DC Transformer", D. Neumayr, M. Voehringer, N. Chrysogelos, G. Deboy and J.W. Kolar, IEEE Power Electronics Transactions 2018, pp. 1-13.
- "Identification of Consumer Behavior via Smart Meters: Novel Artificial Intelligence and Machine Learning Disaggregation Algorithms ", Nikolaos Chrysogelos, Chin Jun Xing , Prof. Dr. Gabriella Hug.
- "Energy Storage for Mechatronic Energy Harvesting System",Nikolaos Chrysogelos, Michael Flankl, Prof. Dr. Johann Walter Kolar.

NTUA   Diploma - Computer engineering

📅 Sep 2007 – May 2013   📍 Athens,GR   8.1/10 (20%)

- "Assessment of the reverse operational characteristics of SiC JFETs in a diode-less inverter", G. Kampitsis, P. Stefas, N. Chrysogelos, S. Papathanasiou and S. Manias, Industrial Electronics Society, IECON 2013 - 39th Annual Conference of the IEEE, Vienna, 2013, pp. 477-482.
- "Performance consideration of an AC coupled gate drive circuit with forward bias for normally-on SiC JFETs", G. Kampitsis, S. Papathanasiou and S. Manias, Energy Conversion Congress and Exposition (ECCE), 2013 IEEE, Denver, CO, 2013, pp. 3224-3229.

INTERESTS AND ACTIVITIES

- Participation in movements and NGOs for successful integration of refugees and asylum seekers coming from war zones into Europe (ETH Discovery Semester, Hackathon - Cern).
- Traveling as a volunteer in NGOs in Nepal and Kenya (Wheeling 2 help, Conscious impact Nepal, Sadhana forest Kenya).
- Volunteer in the first competition for people with disabilities using advanced robotic technologies, Cybathlon 2016 in Switzerland.
- Official underground and exhibition guide at CMS-ATLAS and Computer Centre at Cern.
- Humanitarian Hackathon participant 2018-2020, co-organized by Cern
- Football, basketball, snowboarding, half-marathon runner, theatre.

REFEREES

Dr. Sergei Lupashin
@ sergei.lupashin@gmail.com
✉ @Founder at Fotokite

Dr. Mike Hamer
@ mike@hamer.ai
✉ @ex CTO at Fotokite

Karl Schwabe
@ karl.schwabe@fotokite.com
✉ Systems Engineer Lead at Fotokite

AWARDS

- Bodossaki Foundation, MSc studies.
- Kiprianidis Foundation, Diploma studies.
- High-school performance awards by mayor of Athens.
- Gold medal in school basketball competition.
- Award for the project "Cultural and historical characteristics of our hometown (Kolonos , Athens)".

WORKSHOPS

- "Conflict management for peaceful dialogue" at Le Fai, Erasmus+, France 2017.
- "The Control Systems of the LHC", workshop at CERN, Switzerland 2014.
- "From Algorithms to implementation in FPGA and Complex System on Chip design" at University of Las Palmas, EESTEC student organization, Spain 2013.
- "Smart Energy for a better world", EESTEC student organization, ABB CRC Krakow Poland 2012.
- "Empowering youth possibilities in Europe", Erasmus+, Turkey 2012.