



## Nik G.

AI/ML Lead Engineer

Email: devops@softethica.com

### Soft Skills:

Highly-committed & Self-motivated, Problem solver, Team player.

### Summary

Data Scientist & MLOps with a proven math background and data processing approach understanding, I can set up AI/ML-powered solutions from scratch, enabling ROI.

I'm also good at Web development as a full-stack programmer with a deep understanding of Containerization, Operating Systems, and Networks principals.

### Expertise

Data fetching and manipulation (cleaning, wrangling, feature engineering, etc.)

Building supervised and unsupervised Data Models on datasets

Designing and maintaining AI-powered REST API & Web services

Image & Signal processing

Natural Language Processing and Sentiment Analysis

### Technical Skills

#### AI/ML Technologies

- XGBoost, LightGBM, NumPy, Pandas, ScikitLearn, Dask, Matplotlib, SciPy, PyTorch, Tensorflow, Keras

#### Programming Languages/Technologies

- Python stack: Django, Flask, SQLAlchemy, Reques, Scrapy, LXML, PyMongo
- C
- Reverse Engineering
- JavaScript, (jQuery, Angular.js)

#### Non mainstream/New programming languages

- Lua
- Scheme
- Haskell
- Rust

#### RDBMS/NoSQL

- MySQL
- PostgreSQL
- MongoDB
- SQLite

#### Message Brokers

- Redis RQ
- Celery

#### Application/Web Servers:

- Apache
- Nginx

#### Development Tools

- Vim, Jupyter notebooks

#### Methodologies

- DevOps
- Test Driven Development

#### Operating Systems

- Microsoft Windows Server 2003/ MS Windows Workstations
- Debian/Ubuntu/CentOS Linux, Arch Linux
- MacOS

#### System/Network software/skills

- Firewalls (iptables & etc.)
- Linux network daemons: Proxies, Samba/NFS, DNS, SMPT & etc.

#### CI/CD tools

- GitLab CI/CD

#### Containers

- Docker/Docker Compose

### Professional Experience

#### AI/ML Ops Lead Engineer, SoftEthica (August 2019 - Now)

- **AI/ML-powered predictive maintenance tools** within REST API.
  - o ML solution for HDD failure prediction based on SMART data
  - o ML solution for System failure prediction based on CPU/RAM/HDD/Networks utilization & motherboard sensors data
  - o ML solution for text sentiment analysis
 Technologies/languages/libraries/frameworks: Python, Pandas, ScikitLearn, XGBoost, LightGBM, Google Bert, Flask, Flask batteries (Flask RESTx, etc...) Redis, RQ (message broker over Redis), SQLite/PostgreSQL, PyJWT

#### AI/ML Software Engineer, Mirabit (Apr 2017 – Jan 2019)

- **Building predictive ML models on various datasets.**
  - o System for automation testing of translation predictive models built on SPM (Salford Predictive Modeler) to PMML (Predictive Model Markup Language), Java, C.
  - o Scripts to automate interactions with Google services: Google sheets, Google Disk, etc...

## Education

Donetsk National University

1992-1997, Applied Mathematics,  
Specialist (Master degree)

Courcera

Exploring Quantum Physics  
Machine Learning  
Algorithms: Design and Analysis

- R&D activity aimed at the feasibility of migration of distributed web applications from RESTFull API to RPC (Remote Procedure Call).

Technologies/languages/libraries/frameworks: Python, ScikitLearn, Pandas, NumPy, AsyncIO, Jupyter notebooks, [Jpmmml](#) (complete opensource PMML consumer realisation), [Zementis ADAPA](#)

### Data Scientist / ML Engineer, Salford Systems (Jun 2016 – Apr 2017)

- **Cloud platform: to provide the possibility of parallel building of predictive ML models using both opensource and commercial ML libraries/solution:**
    - Scikit-compatible API
    - Salford Predictive Modeler
    - Distributed version of Gradient Boosting Machine (GBM)
- Technologies/languages/libraries/frameworks: Python, ScikitLearn, Pandas, NumPy, [Dask](#), XGboost, Celery (over RabbitMQ), [SPM \(Salford Predictive Modeler\)](#), Cython, C

### Software Engineer, Coderivium Kharkiv (Oct 2013 – Sep 2015)

- **Web Labyrinth Game:** Platform for bots competition (define all shortest paths).
  - Custom algorithm developed to generate arbitrary specialized maze
  - AL/ML implemented to generate Maze map with predefined complexity level;

Technologies/languages/libraries/frameworks: Python, NumPy, NetworkX, SQLAlchemy, Flask, FlaskRESTFull

- **Device enrollment system:** Integration with Apple Developer Member Centre enabling developers to enroll customer's devices in Apple portal:
  - automated digital signatures management
  - distribution service
  - build server

Technologies/languages/libraries/frameworks: Python, Flask, SQLAlchemy, Jinja2, Mechanize, Celery, Python-LDAP, JSON, LDAP, Javascript, , jQuery

- **Image Filtering/Processing:** IOS app that "comically" distorted the human face:
  - Image rotation/resizing
  - Image processing for smooth rendering & color adjustment moving from RGB to CMYK

Technologies/languages/libraries/frameworks: Objective C, Unity3D, OpenGL shaders (for GPU parallel computing)

- **Data Model development:**
  - Web scrappers for automated data fetching
  - data transformation & distribution - cleaning, wrangling etc.
  - building supervised and unsupervised ML models on fetched data

Technologies/languages/libraries/frameworks: Python, Python multiprocessing, Python Requests, Scrapy, SQLAlchemy , Pandas, ScikitLearn

### DevOps, Freelance (2001-2013)

- **Self-employed: Serving clients worldwide**
    - Designing, deploying, securing and supporting heterogenous Unix / Windows/AD-based IT-infrastructure planning, implementation, and support duties.
- Technologies/languages/libraries/frameworks: RDP (Windows Remote Desktop), Samba, LDAP, Squid, Iptables, iproute2 (ip, tc, etc...), Python, NymPy, SciPy,