## PERSONAL INFORMATION Itai Yona Cohen, PhD

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1 https://www.linkedin.com/in/itai-cohen-50112221/, www.github.com/cohitai/

Gender Male

## JOB APPLIED FOR Senior Data Scientist, Al Algorithms developer, Researcher.

ummary - Data Science and Algorithms development, experienced in Computer Vision and NLP.

#### PROFESSIONAL EXPERIENCE:

## 07/22-Current Self Employed Al Researcher (Freelance)

Al projects by demand.

## 06/21-10/22 Senior Data Scientist, Lite+Fog industries.

Computer Vision tasks, 3d reconstruction, PointNet, Nerf.

### 03/20-04/21 Data Scientist, Berliner Verlag.

Machine Learning projects. NLP algorithms development costumized for Berliner Verlag's data. Web application backend developer.

Project: Recommendations engine for Berliner Verlag.

#### **EDUCATION**

# 2015–2018 PhD - Thesis Title: 'Some Theorems on the Arithmetical plane, Numbers Theory.

Technion, Haifa, Israel

## 2011–2014 MSc. Master of Science - Thesis Title: F-Rings and non additive Kähler differentials.

Haifa Uni, Haifa, Israel

Thesis score 95.

## 2006–2010 Bsc.Physic and Bsc. Math.

Technion, Haifa, Israel.

## Mathematical background

Research in the Technion - extending over my PhD and MSc periods - in numbers theory. A year into my PhD, we came up with the problem of investigating one element in the theory of Prof. Haran, which is the structure of the Arithmetical plane. It concerns a new approach for algebraic geometry, "The field with one element" (F1), which has connections to the heuristic proof of the Riemann Hypothesis (RH) for the number fields case, and to the ABC conjecture.

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#### Selected Programming skills

- 4+ years Python coding experience.
- PyTorch.
- Tensorlow 2.x: implementing various algorithms, fine-tuning of Neural Nets.
- OpenCV.
- Open3D, preprocessing and visualizing tools for point clouds.
- IDEs: Pycharm, Anaconda environment, Visual Studio Code, Vim.
- Profficiency in Linux.
- Photogrammetry: 3D reconstruction with COLMAP, OpenCV.
- SQL.
- MongoDB Atlas.
- Windows/Linux/Mac OS.
- Fluent with Git.
- Cloud experience: MS Azure and Google Cloud Platform.
- Software Engineering: proficiency with Docker, development of K8s cluster (GKE),VPN's, building APIs: Flask and Django.
- Server side experience with Nginx and uWSGI, configuration of a web application into production.
- RT Embedded: conception and implementing Raspberry Pi based vision system, Optical settings.

#### Practical skills

- working as part of a team, cooperating, sharing ideas.
- Solid understaning of the ML pipeline.
- hardware- related issues, Built 2 deep learning rigs with Nvidia's GPUS (RTX 3090 and 2080 TI, Water Cooling).
- project managment, Tech Lead.
- technical and problem-solving skills.
- Research in AI.

#### LANGUAGES

English, Hebrew: Fluent. German: Advanced

#### **PUBLICATIONS**

"New foundations for geometry: Two non-additive languages for arithmetical geometry".

#### **TEACHING EXPERIENCE**

- Teaching Assistant Technion: Linear Algebra. Complex Analysis.
- Teaching Assistant Haifa Uni: Linear Algebra, Abstract Algebra, Set Theory, Probability, Topology, ODE.

### **AWARDS**

Haifa Uni's Excellence grant (2014).

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