

Mgr. Adam Šimáček

Personal information:

Name: Adam Šimáček

Age: 40

Date of birth: 26.06.1986, Olomouc, Czech Republic

Citizen: Czech

Driving licence: B2

Phone: 735 017 746

E-mail address: adsim@seznam.cz

Employment history:

2019 -2026 **DCX TRADE s.r.o.**

Founder / Managing Director / Technology & Business Development

- Since the emergence of modern generative AI, I have focused primarily on **AI video generation**, open-weight models and **GPU infrastructure**. Through **OpenLTX.com**, I work with the LTX family of video models developed by Lightricks, particularly **LTX 2.3** and **LTX 2.5**. **I operate dedicated GPU infrastructure through RunPod** and work with model deployment, ComfyUI workflows, **LoRA training**, **API integration** and the practical use of open-weight AI models on privately controlled infrastructure. OpenLTX.com serves as a dedicated platform and information hub around the LTX ecosystem.
- Alongside AI development, I have been designing and developing web applications and websites using modern web technologies. **Through WeboveStudio.com, I focus on full-stack web development based primarily on Laravel, PHP, SQL, JavaScript/vue.js and MDBootstrap**, covering application architecture, backend development, databases, UI/UX and deployment. Over the years, I have experimented with various technologies and

approaches to modern web design and development, with an emphasis on building complete, functional web applications rather than static websites.

- Another area of my work is cybersecurity, **ethical hacking** and penetration testing. I conduct security research focused primarily on web applications, identifying and testing real-world vulnerabilities and responsibly disclosing security findings. During **security research involving Seznam.cz**, I identified seven security issues, five of which were subsequently published in the **Seznam.cz Security Hall of Fame**. My research has included vulnerabilities such as **HTML injection, reflected XSS, DOM-based XSS, self-stored XSS** and **cross-frame scripting (XFS)**.
- I have also worked extensively with decentralized technologies and alternative approaches to conventional centralized infrastructure. From 2020 to 2023, I founded and operated **ipfsgate.com**, a public **IPFS gateway** providing access to content distributed through the InterPlanetary File System. I also experimented with **Web3 technologies** and smart contracts on the **Polygon (MATIC) network**, as well as deploying and operating websites through the Tor network and Onion Services.
- An earlier part of my work was focused on cryptocurrency infrastructure and exchange services. **Through Multicoín.cz**, I operated a **cryptocurrency exchange** focused particularly on privacy-oriented digital assets such as **Zcash** and **Monero**. This work provided practical experience with cryptocurrency infrastructure, blockchain technologies, digital asset operations and the broader ecosystem surrounding privacy-oriented cryptocurrencies.

2017 - 2019 **Granitol, a.s.**

Purchasing manager (a member of company management)

- Granitol a.s. is the largest manufacturer of blown polyethylene (LDPE and HDPE) films and polypropylene strapping bands in the Czech Republic. These products are designed for the construction, food, chemical, and automotive industries, agriculture, and the manufacture of hygienic products.
- my job is in responsibility for managing of the purchasing department, business negotiations with suppliers and implementation of the tenders

2015 – 2017 **Teva Czech Industries**

Research & Development

- Teva Czech Industries is a pharmaceutical company aimed at research/production of drugs and chemical intermediates
- my specialization was in organic chemistry, mainly in synthesis of chemical substances, intermediates and optimisation and parameterization of the processes

2014 to 2015 **Al Invest Břidličná**

Technologist

- Alinvest company is an important producer of aluminum based packaging materials in food industry (coated/printed aluminum foils and lids for a yogurts, melted cheese, chocolate, butter, drugs etc.)
- as a technologist I was responsible for a coating technologies, implementation of a new technological procedures in production and set up of optimal parameters to increase productivity and quality

- my specialisation also included water-based/organic-solvent based polymers and co-polymers and thermoplastic varnishes
- position also included an implementation of GMP and BRC standards in production

2011 – 2013

Palacky University, Faculty of Science

2012 – 2013 **Science researcher in chemistry**

- synthesis of biologically active compounds in laboratory scale
- basic research aimed at new chemical compounds with cytostatic properties and antimicrobial/antiviral activity
- publication in impacted journals (see publications)

2011 – 2013 **University lecturer**

- department of organic chemistry
- lectures in organic synthesis and laboratory training
- lectures in management of laboratory
- the leader of student's bachelor thesis (see publications)
- (2013) Department of organic chemistry - deputy for studies

2011 – 2012

Secondary polygraphic school, Olomouc

A secondary school teacher (lecturer)

- a teacher of chemistry; chemistry and technology of materials

2008 – 2013

Farmak a.s., Olomouc

Department of Research and Development (R&D)

- Farmak, a.s. is a Czech chemical and pharmaceutical company aimed at development, production, and marketing of active pharmaceutical ingredients, intermediates and specialities

- at R&D I had a professional practice for five years aimed at synthesis of biologically active compounds (quinoline derivatives, quinolones, *N*-Nitroethylenediamines – see publications)
- results of my research are summarised in my diploma thesis and in publications in impacted journals (see publications)

Education:

2011 – 2013

Palacky University, Olomouc

Faculty of Science - Ph.D. (3,5 years - not finished yet)

2008 – 2010

Palacky University, Olomouc

Faculty of Science - master class of organic chemistry (**Mgr.**)

State exam:

- organic chemistry, heterocycles, stereochemistry, mechanisms of organic reactions, analytical chemistry, general and inorganic chemistry, biochemistry;

Diploma thesis:

- Synthesis of *N*-Nitroethylenediamine derivatives

Faculty of Science - lecture training in the field of chemistry

(to be qualified teacher at secondary school/high school)

State exam:

- psychology, didactics in chemistry

2005 - 2008

Palacky University, Olomouc

Faculty of Science - bachelor class of chemistry (**Bc.**)

State exam:

- physical chemistry, organic chemistry, analytical chemistry, general and inorganic chemistry

Bachelor thesis:

- Study of selected chemical reactions by computer chemistry

2001 – 2005

Secondary medical school of Emanuel Pötting, Olomouc
Medical laboratory technician

Graduation:

- Czech language and literature, chemistry, microbiology, haematology, clinical biochemistry)

Language knowledge: English B2

Publications:

- Kvapil, L.; Šimáček, A.; Grepl, M.; Gucký, T.; Pospíšil, T.; Hradil, P. Simple and Efficient Synthesis of *N*-Nitroethylenediamine Derivatives. *Synlett*. 2011, 8, 1168-1170.
- Šimáček, A.; Grepl, M.; Hradilová, L.; Hradil, P.: *Synlett*. 2012, 23, 2205.
- Šimáček, A.; Hradilová L.; Dvořáková, B.; Bertolasi, V.; Jedinak, L.; Hradil, P: *Tetra. Lett*. 2015
- SLÚKOVÁ, Jarmila. SYNTÉZA DERIVÁTŮ 5-AMINOPYRIMIDÍNU [online]. Olomouc, 2013 [cit. 2015-09-17]. Bakalářská práce. Univerzita Palackého v Olomouci, Přírodovědecká fakulta. Vedoucí práce Mgr. Adam Šimáček. Dostupné z: <<http://theses.cz/id/rdk8vq/>>.

Hobbies and interests:

- Combat sports – Krav Maga
- Nature and travel
- Scientific literature

Professional practice and student fellowship

- Department of clinical biochemistry – Palacky University Medical Center (2004; 2 weeks)
- Department of microbiology - Palacky University Medical Center (2004; 2 weeks)
- Synthon, LLC. – department of Research and Development (2008; 3 weeks)
- Teva, LLC. – department of Research and Development (2009; 3 weeks)
- Teva, LLC. – department of Research and Development (2009; 3 weeks)
- CPhI – Madrid, Spain (2012)
- Summer school of medicinal chemistry – Urbino, Italy (2012)
- FloHET – Florida, USA (2013)
- Brock University, Canada (2013 – 3 month) - student fellowship

September 2026, Olomouc

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