## Kühn András Gábor

## Bulletpoints-only CV for a quick yet detailed overview

See the rest on my GitHub page: http://github.com/kuhnandrasgabor/cv

Or chat with me / about my CV with my GPT chatbot: https://chatgpt.com/g/q-CwjQO2tT5-curriculum-virtuale

## **Personal info**

• Location: Szeged, Hungary

• Email: kuhnandrasgabor@gmail.com

Social: <u>LinkedIn</u>Visuals: <u>Gallery</u>



## **Objectives & Aspirations**

- Long-term career in a field aligned with my passions
- Clear opportunities for growth and advancement
- Work-life balance with remote work or flexible hours
- Competitive compensation
- Involvement in meaningful and engaging projects
- Opportunities for continuous learning and professional development
- A balance of autonomy and collaborative teamwork

## **Professional experience**

- Over a decade of diverse professional experience spanning various fields:
  - Machine learning
  - Web development
  - o 3D visualizations
  - o Professional photography
- Experience in leadership roles in **smaller teams**, including:
  - CEO of a tech startup, leading a complex multiplayer online game development project
  - o CTO of a startup providing Al-powered data management and SaaS solutions for aviation and heavy industries
- Very best at creative design and problem-solving
- Excel in multicultural environments due to strong English skills
- Eye for detail and passion for technology and innovation

# 2020 – Present: Data Science, Machine Learning, Full-Stack Developer & Acting CTO at Pzartech Ltd.

- Full-stack web development on .Net Core, Blazor, Razor, MongoDB, MAUI
- ML/Al development with Python
- Image classifier and OCR system training and deployment
- CI/CD with Azure DevOps, Azure Portal

Version control with Git through Azure DevOps

## Web based data management software

- SaaS software structure and design consultation for ERP software
- Azure cloud resource deployment and management
- Azure DevOps project management, CI/CD
- .Net Blazor Razor pages based project with MAUI multiplatform build targets
  - o Azure bucket storage integration and management
  - o API connections between
    - frontend server
    - core server
    - various recognition module servers
  - o Image and Character recognition development and integration
  - o Responsive UI with MudBlazor (although I'm not really a front-end developer)
  - ElasticSearch based page and usage analytics prototype
  - o Media storage and streaming prototype with Azure media services
  - o SAP integration prototype for SAP HANA S/4 Product Master Data

## Skills used/developed

- C#, Python, HTML
- .Net Core, Blazor, Razor, MongoDB, MAUI
- Azure DevOps, Azure Portal, CI/CD
- Version control with Git through Azure DevOps

#### Machine learning and training

- ML dataset generation
  - o Raw video processing, segmentation, enhancement, evaluation for semi-synth data
  - Realistic generation of labeled synthetic images
  - Dataset management and tooling
- ML Training
  - o Image quality assessment network for training data evaluation
  - Bounding box generation network for training data evaluation
  - o Image classifier network for industrial part recognition
  - o Optical character recognition system
- Integrating with existing SaaS architecture in Azure's cloud
- Performance charting and analysis

#### Skills used/developed

- C# for the API, but mostly Python for training and inference
- FastAi, PyTorch, TensorFlow, Jupyter notebooks and Paperspace Gradient
- Flask, seaborn, matplotlib, pandas, numpy
- Docker, Docker-Compose

# 2011 – Present: Freelance Professional (Photography, 3D Graphics, Webdesign, Architectural Visualization)

- Designing and modeling houses and environments
- Creating 3D models and animations
- PHP3 and Magento-based online store
- Multilanguage checklist app for iOS
- Branding, advertising, logo and web design
- Freelance photography

• Remodeling and renovation work

## 3D modelling and visual effects

- visualizing and rendering various natural disasters
- distributed rendering locally on several machines
- physics simulation including fluids, smoke, collisions, and destruction

## Go to 3D gallery [↓]

#### **Interactive Architectural Visualization**

- Real-time interactive demo software using Unreal Engine 4
- Hybrid lighting, using both real-time reflections and switchable dynamic lights, with pre-baked lightmaps
- Realistic PBR materials and textures
- Custom model generators for kitchen cabinets and a sunlight based 3D plant-growth model in Houdini

## Go to interactive gallery [↓]

#### **Realistic Architectural Visualization**

- Realistic rendering
- Solar gain analysis
- Quick and dirty mockup from on-site photos and measurements

## Go to realistic gallery [↓]

## 2014. – 2020. Stoneglass Labs KFT., Szeged (CEO)

- Corporate administration
- Project management
- Business negotiation
- Software and hardware acquisition
- Network and sysadmin tasks
- Administrative tasks

## Stars End (MMORPG game software project)

- Creative lead design
- Software design and development
  - o Engine customization
    - Unity 3D
    - Unreal Engine 4
  - o Architecture
  - o Network communication
  - Data security
  - o Scalability
- Gamedesign
  - o Graphics design
    - Brand
    - 2D, 3D assets
    - UI/UX
    - VFX, shaders
    - AI, FSM
  - Sound and music
  - o Level design
  - Story, missions and background info

• Development of content generation tools and additional software

## Go to starsend gallery [↓]

## **Studies**

- Business Coaching (2013 2014) Basic business workflow and management training through Támop 2.3.6 grant.
- **Tripont Light Academy 1-2-3** (2011 2013) Comprehensive training in lighting techniques, various photography disciplines, and project management.
- **SZTE JGYPK, Web Programmer Certificate** (2010 2011, *Incomplete*) Gained foundational skills in web development, including HTML, Java, SQL, and graphic design. Lost interest and shifted to photography and entrepreneurship.
- **SZTE TTIK, Computer Engineering BSc.** (2008 2010, Incomplete) Attended courses in programming (C, Assembly), computer architecture, discrete mathematics, and algorithms. Did not complete the degree, switched career focus.

## Skills and competencies

## **Technical Skills**

## **Programming Languages**

• Experienced: C#, Python

• Proficient: C++, HTML, CSS, SQL, PHP

• Familiar: Java, JavaScript, TypeScript, C, Google Script, assembly

## Frameworks and Technologies

• Web Development Frameworks:

o Experienced: .NET Core, Blazor, Razor, MAUI, MudBlazor

Proficient: Angular Familiar: Flask

• Machine Learning Frameworks and Tools:

o Familiar: FastAl, PyTorch, TensorFlow, Scikit, Jupyter Notebooks, Paperspace Gradient

• DevOps and Containerization:

• Experienced: Azure DevOps

o **Proficient:** CI/CD pipeline implementation

o Familiar: Docker, Docker Compose

• Data Analysis and Visualization:

o Familiar: Pandas, NumPy, Matplotlib, Seaborn

## **Databases and Data Management**

• **Proficient:** MongoDB, SQL databases (e.g., MySQL, SQL Server)

• Familiar: ElasticSearch

## **Cloud Services and DevOps**

• Experienced: Azure DevOps, Portal, Storage, App services and VMs

• Proficient: Azure Resource Management, CI/CD pipeline implementation

• Familiar: Docker, Docker Compose, Azure Media Services

#### **Software and Tools**

Version Control:

Experienced: with Git (Azure DevOps, GitHub)

o Familiar: with SVN

• 3D Graphics and Modeling:

- Experienced: Blender 3D, Unreal Engine 4, Unity 3D
- **Proficient:** Substance Painter, Substance Designer, SketchUp, V\*Ray
- o Familiar: Houdini, SolidWorks CAD, ArchiCAD, CATIA, Fusion 360

#### Adobe Creative Suite:

o Experienced with Adobe Photoshop and Adobe Lightroom

## **Creative Design and Game Development**

- 2D/3D asset creation, vector graphics, modeling, texturing, lighting, and rendering
- UI/UX design for web and applications
- Visual storytelling and game design
- VFX, shaders, and procedural/parametric modeling
- Experience with game development and engine customization in Unity 3D and Unreal Engine 4
- Animation and physics simulation

## **Professional Skills:**

- Project Management: Experience managing projects from conception to completion, including software development, marketing campaigns, and creative projects. Familiar with Agile methodologies and Azure DevOps for CI/CD pipeline management.
- **Business and Negotiation:** Experience in business negotiation, client management, and corporate administration. Skilled in developing and executing strategic business plans.
- **Creative and Design Skills:** Strong background in creative design, including 2D/3D asset creation, UI/UX design, and visual storytelling for gaming and simulation. Experienced in VFX, shaders, and procedural/parametric modeling.

## **Soft Skills:**

- **Leadership:** Experience in managing smaller cross-functional teams in mostly startup environments. Capable of mediating conflicts and fostering a collaborative workplace.
- **Communication:** Fluent in English (C2) and beginner in German (A1). Skilled in clear and effective communication with both technical and non-technical stakeholders.
- **Problem-Solving and Adaptability:** Strong analytical skills with a demonstrated ability to solve complex problems and adapt to new challenges. Comfortable learning new technologies and tools independently.