Kühn András Gábor

Bulletpoints-only CV

See the rest on my GitHub page:

http://github.com/kuhnandrasgabor/cv

Personal info

- **Location:** Szeged, Hungary
- **Email:** kuhnandrasgabor@gmail.com
- **Social:** LinkedIn
- **Visuals:** Gallery

Professional experience

- Over a decade of diverse professional experience spanning various fields:
  - **Machine learning**
  - **Web development**
  - **3D visualizations**
  - Professional **photography**

- Experience in leadership roles in **smaller teams**, including:
  - CEO of a tech startup, leading a complex multiplayer **online game development** project
  - CTO of a startup providing **AI-powered industrial data management** and SaaS solutions for aviation MROs 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/AI 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
  - Azure bucket storage integration and management

- API connections between
  - frontend server
  - core server
  - various recognition module servers

- Image and Character recognition development and integration
- Responsive UI with MudBlazor (although I'm not really a front-end developer)
- ElasticSearch based page and usage analytics prototype
- Media storage and streaming prototype with Azure media services
- 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
  - Raw video processing, segmentation, enhancement, evaluation for semi-synth data
  - Realistic generation of labeled synthetic images
  - Dataset management and tooling

- ML Training
  - Image quality assessment network for training data evaluation
  - Bounding box generation network for training data evaluation
  - Image classifier network for industrial part recognition
  - 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
  - Engine customization
    - Unity 3D
    - Unreal Engine 4

  - Architecture
  - Network communication
  - Data security
  - Scalability

- Gamedesign
  - Graphics design
    - Brand
    - 2D, 3D assets
    - UI/UX
    - VFX, shaders
    - AI, FSM

  - Sound and music
  - 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.

Personal 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:**
  - **Experienced:** .NET Core, Blazor, Razor, MAUI, MudBlazor
  - **Proficient:** Angular
  - **Familiar:** Flask

- **Machine Learning Frameworks and Tools:**
  - **Familiar:** FastAI, PyTorch, TensorFlow, Scikit, Jupyter Notebooks, Paperspace Gradient

- **DevOps and Containerization:**
  - **Experienced:** Azure DevOps
  - **Proficient:** CI/CD pipeline implementation
  - **Familiar:** Docker, Docker Compose

- **Data Analysis and Visualization:**
  - **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)
  - **Familiar:** with SVN

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

- **Adobe Creative Suite:**
  - Experienced with Adobe Photoshop and Adobe Lightroom

Creative Design and Game Development

- 2D/3D asset creation

- 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
- 3D modeling, texturing, lighting, and rendering
- Animation and physics simulation
- Architectural visualization and development of interactive demos

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.