Kühn András Gábor

Bulletpoints-only CV

See the rest on my GitHub page:

http://github.com/kuhnandrasgabor/cv

Personal info

• Location: Szeged, Hungary

• Email: <u>kuhnandrasgabor@gmail.com</u>

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



Professional experience

- Over a decade of diverse professional experience spanning various fields:
 - Machine learning
 - Web development
 - 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
 - CTO of a startup providing Al-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
 - 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
- 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
 - o Realistic generation of labeled synthetic images
 - o 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
 - 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

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
 - Network communication
 - o Data security
 - o Scalability
- Gamedesign
 - Graphics design
 - Brand
 - 2D, 3D assets
 - UI/UX
 - VFX, shaders
 - AI, FSM
 - Sound and music
 - o Level design
 - o 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:

o 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

o **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

- 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.