MOHAMMAD ABUTAHOUN

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SUMMARY

Pipeline Technical Director and Software Developer with 5 years of experience in software development, and 3 years of experience in developing pipeline tools using Python, PyQt, and PySide. Holder of dual degrees in Computer Science and Animation, with a proven track record of streamlining workflows, integrating ShotGrid, and creating real-time motion capture solutions. Passionate about designing efficient, artist-friendly pipelines that enhance productivity and creative collaboration.

TECHNICAL SUMMARY

EXPERTISE

Pipeline Tools Development, Maya Scripting & Integration, Scrum Agile, ShotGrid Workflow Automation, Motion Capture Interfaces, Cross-Department Collaboration, Technical Problem Solving, Creative & Technical Communication, Process Optimization for Artists, Version Control & Deployment, Multidisciplinary Thinking

Programming Languages and Software

Python, PyQt, PySide, Maya, ShotGrid, Git, Jira, Linux, Windows, REST APIs, Nuke

EXPERIENCE

Pipeline Technical Director

Beyond Capture (2023-2024), Vancouver, BC

Industry-leading motion capture studio supporting high-end film, TV, and AAA game productions. Beyond Capture operates one of the largest motion capture stages in North America, providing advanced full-body and facial performance capture for top-tier studios worldwide. Known for its precision technology and collaborative environment, the studio plays a critical role in bringing digital characters to life in cinematic and interactive media.

Highlights:

- Developed a real-time Python interface for motion cameras, reference cameras, and microphones using API, FTP, and REST protocols; removed manual file processing by automating data transfer into the pipeline, reducing time between shots by over 50% and improving reliability and synchronization.
- Automated actor microphone control using Open Sound Control (OSC), dynamically toggling mic states based on real-time actor presence in the shot, reducing audio cleanup and improving multi-actor session quality.
- Researched emerging technologies and data transfer protocols (API, FTP, REST) to identify performance bottlenecks in the mocap pipeline; implemented innovative realtime solutions that streamlined capture-to-delivery workflows and enhanced on-set efficiency.
- Collaborated with the Motion Capture Supervisor, pipeline TDs, and stage operators at multiple Beyond Capture locations to gather requirements and validate the real-time Python interface for motion capture hardware, ensuring smooth operation of cameras and microphones as well as seamless data ingestion into the pipeline during shoots.

Pipeline Technical Director

Kickstart Entertainment (2021-2023), Vancouver, BC

Global animation studio specializing in 2D and 3D cartoon production for television and streaming platforms. Kickstart Entertainment is a leading production company known for its work on high-quality animated series for major networks and streaming services. The Vancouver studio specializes in pre-production, asset development, and pipeline support for 2D and 3D cartoons, collaborating closely with international teams to bring stylized, story-driven content to life.

- Developed a custom cartoon production pipeline using Python and PyQt to streamline asset publishing and versioning across departments, reducing artist turnaround time by 50% and minimizing manual errors by 80%
- Integrated an automatic file handler into the pipeline to detect, validate, and import assets from partner studios in real time, ensuring consistent structure and eliminating manual file checks.
- Built a PySide-based asset publishing and loading toolkit in Maya, integrated with ShotGrid to automate version control, naming conventions, and folder structure validation, significantly reducing publishing errors and accelerating asset delivery
- Developed custom EDL tools in Python to support editorial workflows, enabling accurate shot tracking, conforming, and integration with production data, which improved coordination between editorial and animation departments.
- Authored and maintained comprehensive internal wiki documentation for pipeline and DCC tools, including usage guides, improving onboarding efficiency and reducing dayto-day support requests
- Trained artists across layout, animation, and comp departments on newly developed pipeline tools and workflows; created clear documentation and conducted hands-on sessions to ensure smooth adoption and consistent tool usage across productions.
- Mentored a junior Pipeline TD by providing hands-on training, code reviews, and guidance on studio pipeline standards; accelerated their onboarding and contributed to their successful integration into active production support.

GIS Developer

Infograph (2012-2018), Amman/Jordan

InforGraph is a leading GIS solutions provider specializing in ESRI-based mapping, spatial analysis, and custom geospatial software development. Serving clients across the Middle East, InforGraph delivers tailored GIS applications that enhance decision-making and operational efficiency.

 Designed and implemented GIS tools to visualize and analyze geographic data for municipal and infrastructure planning, enabling clients to make faster, data-driven decisions on zoning, utilities, and transportation networks.

EDUCATION

Applied Business Management, University of Manitoba, Manitoba/Canada (2020)

Bachelor of Science in Computer Animation, Full Sail University, Florida/USA (2016)

Bachelor of Science in Computer Science, University of Jordan, Amman, Jordan (2008)