

# HUI “AMALIE” SHI

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## PROFESSIONAL EXPERIENCE

### Software Test Engineer

Adaptix Ltd. | Oct 2022 – Present

- Architected and implemented 30+ test automation frameworks using Python, PyTest, Django, and PyWinAuto for medical device software and 3D imaging UI verification.
- Performed software verification and validation (V&V) for veterinary and orthopedic X-ray systems in compliance with IEC 62304 and other regulatory standards.
- Developed and executed system, integration, and functional test procedures to increase test coverage and improve software quality for regulated healthcare products.
- Authored test reports, documented defects, and partnered with cross-functional engineering teams to investigate and resolve 45+ software and hardware issues through troubleshooting and root cause analysis.
- Automated high-volume UI workflows for image acquisition, reducing manual testing effort and accelerating release readiness.

### Software Applications Engineer

Informetric Systems Inc. | Feb 2021 – Aug 2022

- Gathered and translated business and user requirements into configurable automation logic for pharmaceutical manufacturing software used in production environments.
- Developed, tested, and validated software updates and hotfixes for InfoBatch and supported release management activities for InfoLog.
- Built VM-based test environments, created installation packages with Advanced Installer, and designed automated test procedures to support software deployment and validation.
- Investigated and resolved customer-facing software issues involving reporting, data transfer, and device integration, improving system uptime and user satisfaction.
- Collaborated with software developers, QA, and client engineering teams on requirements analysis, testing, and production support.

### Pharmaceutical Engineer

Aphena Pharma Solutions | Jan 2020 – Feb 2021

- Authored and executed 30+ validation protocols and reports for automated pharmaceutical manufacturing systems under FDA cGMP requirements.
- Commissioned and qualified 8+ systems, including blending, labeling, serialization, and water purification equipment.
- Supported process validation, equipment qualification, CAPA, and preventive maintenance activities to improve compliance, reliability, and operational efficiency.
- Used data analysis and engineering methods to optimize 5+ manufacturing and laboratory processes.

## EDUCATION

Johns Hopkins University — M.S.E. in Biomedical Engineering, Dec 2019

Georgia Institute of Technology — B.S. in Biomedical Engineering, Highest Honors, Dec 2016

## CERTIFICATIONS

PMP | ISTQB Certified Test Automation Engineer (CTAL-TAE) | ISTQB Certified Foundation Level 4.0 | Certified Six Sigma Yellow Belt (CSSYB) | Engineer-In-Training (EIT), Chemical Engineering

## SKILLS

Python, C#, PyTest, Django, PyTorch, SQL, HTML/CSS/Javascript, Git, Azure DevOps, Jira, Test Automation, Verification and Validation (V&V), System Testing, Defect Tracking, Root Cause Analysis, Requirements Traceability, Medical Devices, IEC 62304, FDA cGMP

## SELECTED PUBLICATIONS

- *Building Scalable and Automated Verification Tools for Healthcare Imaging Systems* — Medical Informatics Europe, 2026
- *The Ultimate Swiss Army Knife of UI Software Testing: Accelerating Workflow-Based Automation* — Selenium Conference, 2025
- *Performance Assessment of Texture Reproduction in High-Resolution CT* — SPIE Conference Proceedings, 2020