

KLEVIS ALIAJ

SUMMARY

I am a meticulous, concise, and versatile software developer, data scientist, and automation engineer – with 15 years of experience in industry and academia. I enjoy working on complex projects and writing readable, efficient code. I am a good listener and communicate clearly.

EXPERIENCE

Dell Technologies

Austin, Texas

DATA SCIENTIST

Oct 2021 - Present

- Implement Python package that enables data science teams to run and track machine learning models on Kubernetes cluster.
- Develop and improve time series revenue prediction model based on Prophet.
- Design data extraction and caching pipeline to accelerate revenue prediction model.
- Develop Plotly Dash web app to visualize revenue predictions and model accuracy.

SQL Kubernetes Docker S3 Python Pandas Plotly Dash Prophet

University of Utah

Salt Lake City, Utah

GRADUATE RESEARCH ASSISTANT

Aug 2015 - July 2021

- Designed and implemented 3D visualization software that was accepted into the Journal of Open Source Software.
- Utilized techniques such as Principal Component Analysis and Dynamic Time Warping to analyze motion capture datasets.
- Employed gradient-based and heuristic optimization algorithms to robotically replicate motion capture recordings of the arm.
- Applied Bayesian data analysis (PyMC3) to infer kinematic parameters of 3D rotations.
- Implemented Python Kalman filters to smooth, interpolate, and extrapolate time series data.
- Utilized 1D statistical parametric mapping to run hypothesis tests over time series data.
- Created Python web application for predicting rotator cuff re-tear likelihood.
- Utilized conventional hypothesis testing (t-test, ANOVA) to analyze biomechanics datasets.
- Created interactive 2D (matplotlib and Plotly) and 3D (three.js) visualizations.
- Redesigned and implemented finite element method computational framework for investigating angiogenesis.
- Published 3 first-author papers in top biomechanics journals.

Python NumPy SciPy Pandas PyMC3 scikit-learn Plotly JavaScript three.js C++ NLOpt
Eigen MATLAB C# Robotics Kalman Filter Kinematic Analysis Quaternions FEA

Allegiance/MaritzCX

Austin, Texas





AUTOMATION ENGINEER

Oct 2014 - Aug 2015

- Maintained and updated C#, NUnit-based, multi-threaded automation framework.
- Wrote test cases to validate the application-layer services of the Allegiance SaaS platform.

C# NUnit REST multi-threaded

CONTACT

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-  github.com/klevi-a

EDUCATION

Ph.D. in Biomedical Engineering

UNIVERSITY OF UTAH Salt Lake City
Aug 2015 - May 2021

B.S. in Biomedical Engineering

UNIVERSITY OF TEXAS Austin
Aug 2004 - May 2007

SKILLS

Programming: Python, MATLAB, JavaScript, C++, C#, Java, SQL, REST, HTML, CSS

Scientific Frameworks: NumPy, Scikit-learn, SciPy, Pandas, PyMC, Matplotlib, Plotly, NLOpt, Robot Operating System, Eigen

Software Frameworks: three.js, Flask, SQLAlchemy

Developer Tools: Kubernetes, Docker, Git, Subversion, AWS Lambda, AWS DynamoDB, CMake, Jenkins, Apache Ant, NUnit, JUnit

Engineering/Scientific: Robotics, Nonlinear Optimization, Kalman Filtering, Finite Element Analysis, Kinematic Analysis, Inverse Dynamics, Continuum Mechanics

INTERESTS

Basketball Programming
Paddleboarding Tai Chi
Math Cooking

IXIA

Austin, Texas

PRINCIPAL SOFTWARE ENGINEER IN TEST

Dec 2013 - Oct 2014

- Designed, developed, and unit tested Java-based test resource manager featuring a REST API, concurrency control, Google Web Toolkit (GWT) UI, and MySQL database.
- Designed and implemented an annotation-based, resource-aware automation framework to interface JUnit and Robot Framework with the test resource manager.
- Validated the IXIA Network Visibility REST API using the resource-aware automation framework and JUnit.

Java REST concurrency control multi-threaded MySQL GWT Google Guava JUnit

CA Technologies/NetQoS

Austin, Texas

SENIOR SOFTWARE ENGINEER

June 2012 - Dec 2013

- Implemented new features (Java and JavaScript), fixed defects (C#), and collaborated with product design, management, and documentation teams following Agile practices.
- Led team's continuous integration effort by developing automation framework (Apache Ant and Jenkins) that centralized software installation, configuration, and test case execution.

Java JavaScript C# Agile Apache Ant Jenkins Continuous Integration

AUTOMATION ENGINEER

Sept 2010 - June 2012

- Developed on-demand server reservation and configuration system, enabling developers to quickly assess the effects of their code changes in an isolated testing environment.
- Implemented web service testing automation platform.
- Maintained lab comprised of over 100 servers.
- Led performance and scalability testing.

VMWare ESXi VBScript

TECHNICAL SALES ENGINEER

Aug 2009 - Sept 2010

- Installed and configured NetQoS proof-of-concept servers at prospect's site.
- Utilized data from proof-of-concept installation to highlight how the NetQoS product suite's capabilities aligned with the prospect's application performance goals.
- Presented to prospect's management team the technical value of the NetQoS product suite.

Solution Selling Customer Needs Public Speaking

SUPPORT ENGINEER

June 2007 - Aug 2009

- Responded and troubleshoot support cases submitted via email, phone, or web portal.
- Consistently ranked as one of the top 3 support engineers in terms of cases resolved and customer satisfaction.
- Identified, reproduced, and documented software defects.

Cisco Certified Network Analyst MySQL IIS Customer Satisfaction

LANGUAGES

English

Native-Like

Albanian

Native

Spanish

Limited