

## TECHNICAL SKILLS

**Frontend Web Development:** HTML, CSS, JavaScript, jQuery, TypeScript, Bootstrap, Npm, React JS, AngularJS

**Backend Web Development:** OOP, PHP, C#, .NET, RestAPI, Django, Spring Boot, MVC, Postman, Apache, Docker

**Python:** NumPy, Pandas, Matplotlib, Seaborn, Scikit-Learn, SciPy, TensorFlow, Keras, PyTorch, Scrapy, BeautifulSoup

**Database Management and Visualization:** MySQL, Microsoft SQL Server, SQLite, MongoDB, Power BI, Tableau

**Data Science:** Data Modeling, Data Visualization, Business Intelligence, Statistical Analysis, Advanced Microsoft Excel

**Cloud Tools:** Azure, SSIS, SSAS, SSRS, Snowflake, AWS

**Project Management Tools:** Trello, Jira, Rally

**IDEs / OS / Tools:** Linux, Windows, macOS, Git/Github, Visual Studio Code, Xdebug

**SWE Concepts:** Water Fall / Agile Methodologies, Scrum, API

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## EDUCATION

Texas Tech University

Masters in Computer Science, GPA: 3.916

Lubbock, Texas

May 2023

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## EXPERIENCE

Paycom

Software Developer

Grapevine, Texas

Jul 2023 – Present

- Collaborate with cross-functional teams, including product managers, designers, and QA engineers, to design, develop, and maintain CRM software solutions tailored to the needs of the payroll industry.
- Contribute to the design and architecture of CRM applications, ensuring scalability, performance, and security.
- Develop and maintain CRM software features and modules, including lead management, contact records, sales pipelines, task management, and reporting.
- Assist in creating custom CRM reports and dashboards to provide valuable insights into customer interactions and sales performance
- Implement user authentication, access controls, and data encryption mechanisms to safeguard sensitive customer information and ensure compliance with data privacy regulations.

Advanced Particle Detector Laboratory, Texas Tech University

Research Assistant / Student Assistant

Lubbock, Texas

Oct 2021 – May 2023

- Performed end-to-end deployment of ML and NLP solutions on cloud computing platforms like AWS, Azure, and Google Cloud.
- Build a Web Interface using Python and Flask to digitize the process of Quality Assurance Testing on Silicon Sensors.
- Implemented the YoloV5 Object Detection algorithm to determine the location of anomalies in the silicon sensor images.
- Designed Multi Class and Multi Label Classification System in Python with 97% accuracy using MobileNetV2 CNN and Scikit to classify silicon sensor images with different types of anomalies.
- Used UNET model for Quality Assurance to find faulty silicon sensors.
- Contributed to building a dataset of silicon sensor images and speeding up Quality Assurance Automation process.
- Conducted data preprocessing tasks, such as cleaning, feature engineering, and normalization, to prepare datasets for machine learning experiments.
- Leveraged version control systems like Git for efficient code collaboration and management.
- Analyzed large and imbalanced datasets by performing exploratory data analysis in Python to provide data insights and optimistic solutions.
- Created and implemented SQL queries, stored procedures, functions, packages, and triggers in SQL Server.
- Utilized modern web development frameworks and libraries such as React, Angular, and Vue.js.

Grow By Data

Data Analyst

Kathmandu, Nepal

Sept 2019 – Jul 2021

- Utilized corporation developed Agile and SDLC methodology used Microsoft office software to perform required job functions.
- Worked extensively on Data Profiling, Data cleansing, Data Mapping and Data Quality.
- Improved website performance by optimizing code, reducing page load times, and enhancing overall user experience.
- Involved in writing, testing, and implementing triggers, stored procedures and functions at Database level using PL/SQL.
- Documented technical specifications and provided training to junior developers to maintain knowledge transfer.

- Prepared graphs and reports using ggplot2 library for an overview of the analytical models and results.
- Used Power BI power query to extract data from external sources and modify data to a certain format as required for consumption in the dashboards.
- Imported the claims data into Python using Pandas libraries and performed various data analysis.
- Aggregated web forum data in a MySQL database environment.
- Generated various capacity planning reports (graphical) using Python packages like NumPy, Matplotlib, Scikit-Learn, and SciPy.
- Used JIRA and Git for version control in the project management.

## Skeinsoft

Pokhara, Nepal

### Junior Web Developer

Feb 2017 – Apr 2019

- Created custom WordPress themes and templates to meet client requirements, ensuring responsive design and optimal user experience.
- Collaborated with the development team to design, develop, and maintain Ecommerce websites for clients using WordPress and Ecommerce platforms such as WooCommerce or Shopify.
- Implemented and customized Ecommerce plugins and extensions to add functionality like product catalogs, shopping carts, payment gateways, and order processing.
- Managed website content updates, including product uploads, price adjustments, and promotional campaigns, ensuring accurate and up-to-date information.
- Assisted in SEO (Search Engine Optimization) efforts, optimizing website content, meta tags, and implementing SEO best practices to improve organic search rankings.
- Conducted thorough testing, debugging, and quality assurance to identify and resolve issues related to functionality, cross-browser compatibility, and security.

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## PUBLICATIONS / PREPRINTS

### Deep Learning Applications For Quality Control In Particle Detector Construction

- Akchurin, N., et al. "Deep Learning Applications for Quality Control in Particle Detector Construction." ArXiv.org, 16 Mar. 2022, <https://doi.org/10.48550/arXiv.2203.08969>.
- This paper explores the use of deep learning-based computer vision techniques to perform quality checks of detector components and assembly steps, which will automate procedures and minimize the need for human interventions.

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## PROJECTS

### Ecommerce Store Web Project | ReactJS | [GitHub](#)

- Developed simple ecommerce project using ReactJS allowing users to create, read, update, and delete products.
- Implemented React Hooks, React Redux and localStorage to manage the state and persist the data.
- Added functionality for user to add products to the cart.

### Animal Classification and Detection | AngularJS, Python | [GitHub](#)

- Created web interface using Python and Django to allow users to upload images and view results for animal classification and detection.
- Achieved 96% accuracy with implementation of Yolov5 to determine location of the animals in images.
- Performed Transfer Learning with MobilenetV2 to create multilabel classification model for animals classification with 98% accuracy.
- Developed a Python script to download animal images from various sites (Google, Pixabay, Unsplash) for building images dataset.

### Money Laundering Detection Web Application | React JS, Python | [OneDrive](#)

- Created Web and Artificial Intelligence application for Money Laundering Detection which reduces review operation costs.
- Implemented Python Flask as the backend and React JS, HTML, CSS and Bootstrap as the frontend for the web application.
- Deployed the Machine Learning models which is able to take the data from static rule based AML systems and further classify them as Fraud or Not Fraud to reduce the False Positives.

### Phishing Website Detection by Machine Learning | Python | [GitHub](#)

- Developed the software on Jupyter Notebook IDE that classifies websites as phishing or non-phishing.
- Implemented Decision Tree, Random Forest and K-Means Clustering machine learning models in Python to train dataset and compare the model's performance on test dataset.
- Extracted Address Bar, Domain and HTML & JavaScript based features from websites to create test dataset.
- Used Random Forest on test dataset achieving 92% precision and 94% recall.