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SUMMARY

A strong background in programming and computer engineering, as well as more than two years of professional experience as a software developer engaged in object-oriented analysis, design, development, testing, deployment, and maintenance of client-server web applications utilizing Java technologies.

Having a broad spectrum of expertise in creating wireframes to responsive web design solutions using Adobe XD and Figma, deploying designs utilizing frontend technologies such as HTML5, CSS3, Bootstrap, React, and JavaScript, and incorporating backend technologies such as Spring framework, Node.js, MySQL, and Firebase.

competent of creating and deploying machine learning models using TensorFlow and python, collecting, analyzing, and preparing data sets using modern python libraries including Pandas and NumPy as well as developing mobile applications using Java, Kotlin, Android Studio, Firebase, and SQLite technologies.

PROFESSIONAL SKILLS

Programming Languages: Java, C++, C#, Kotlin,
Scripting Languages: PHP, Python, JavaScript
Databases: MySQL, MongoDB, PostgreSQL, Firebase, SQLite, GitHub, and Git.
Tools and IDEs: VS Code, Visual Studio, Android Studio, IntelliJ IDEA, Google Colaboratory, Adobe XD, Figma, Cisco Packet Tracer, and Unity engine.
Platforms: Windows 7/8/10/11, Linux (Ubuntu), MacOS
Networks: Web Development with HTML5, CSS3, Bootstrap5, JavaScript, WordPress, Spring Framework, Node.js, ASP.NET and PHP.
Others: extensive foundation in UML, Software development life cycle, agile methodology, data structures and algorithms, and strong team-based professional development foundation.

PROFESSIONAL EXPERIENCE

1. United Arab Emirates University, UAE 04/2022 – To Present

Address: ([National Water and Energy Center](#) , Al Ain, UAE)
Position: Data analyzing and building machine learning models for weather prediction in the National Water and Energy Center sector (*Internship).*

Project Name: Time series weather prediction models using machine learning.
Project Description: Part of the institute's vision to address water resources, energy, and environmental challenges in arid and semi-arid regions through innovative, integrated, interdisciplinary approaches. The project focuses on developing neural network models that forecast weather information for the near future using data collected from range of geographical places.

Project Duration: 04/2022 – To Present

Programming Duration: 14 weeks
One month of studying, analyzing, transforming, and selecting viable datasets and data representation methods, two months of implementing appropriate ML algorithms and tools, conducting machine learning tests and experiments, performing statistical analysis and fine-tuning. one month of deploying and maintaining the machine learning models.

Responsibilities:
• Performing data gathering, cleaning, analyzing, interpreting, and organizing.
• Using statistical tools and techniques to interpret data sets and identify trends and patterns.
• Researching and implementing of ML algorithms and tools.
• Design, developing, testing, deploying, and documentation of the machine learning systems.
• Performing model training and testing.
• Collaborating with programmers, engineers, and organizational leaders to identify opportunities for process improvements, recommend system modifications.
• Used Python, Java, Google Colaboratory, Machine learning libraries and tools such as Pandas, NumPy, Scikit-learn, PyTorch, Keras …

2. United Arab Emirates University, UAE 01/2022 – 04/2022

Address: ([UAEU](), Al Ain, UAE)
Position: Developing and deploying machine learning models using deep learning and OpenCV library (*University Curriculum*).
Project Name: Traffic Sign Detection and Recognition using OpenCV and Python.

Project Description: Road Sign Detection and Recognition System (RSDRS) is an innovative deep learning-based intelligent transportation system that provides a safe, efficient, and integrated environment. It aims at aiding drivers in recognizing road signs and navigating them throughout the journey. The project is considered a vital component in modern visual driver aid systems and plays a crucial role in autonomous vehicles.
Project Duration: 01/2022 – 04/2022
Programming Duration: 16 weeks
Two months researching, project planning, and collecting data. one month of training, testing, parameter tuning and model evaluation, one month of deploying and maintaining code.
Responsibilities:
- Data preparing, analysis, and organizing.
- Training deep learning models, parameter tuning,
- Deploying the trained model.
- Used Python, OpenCV, TensorFlow, Google Colaboratory, GitHub, Git, Java, Kotlin, Android Studio, SQLite, Figma/Adobe XD …

3. United Arab Emirates University, UAE, 01/2021 – 12/2021

Address: ([UAEU](), Al Ain, UAE)
Position: Frontend developer (*Part-time paid*).

Project Name: United Arab Emirates University Website Design Optimization

Project Description: Designing the user interface using Figma and Adobe XD and deploying designs using frontend technologies such as HTML, CSS, JavaScript, and React to develop the client side of a website.

Project Duration: 01/2021 – 12/2021

Programming Duration: 49 weeks
Two months for feasibility studies and system design, project planning, and user interface design, four months for coding and development, and five months for testing, deploying, and maintaining.

Responsibilities:

- Collaboration with clients to develop the overall appearance and style of a website
- Designing and optimizing the user interface experience.
- Writing website code using HTML5, CSS3, JavaScript, React, VS Code and WordPress
- Making responsive website that are accessible across multiple platforms
- Fixing bugs and testing for usability.

4. Company Name: Hannibal Hotel, 12/ 2017 - 09/ 2018

Address: (Sembel, Asmara, Eritrea)
Position: Software Developer *(Full-time paid).*

Project Name: Hotel Management System
Project Description: Application software for online booking and databases management.
Project Duration: 12/ 2017 - 09/ 2018

Programming Duration: 35 weeks
Two month of project planning, user interface designing and software requirements utilizing Agile methodology, four months of designing, developing, and two months of maintenance, testing, evaluating, and implementing.
Responsibilities:
- Collaborating with developers to design algorithms and flowcharts.
- Analyzed user and software requirements and developed architectural design to assess project viability.
- Designing, coding, testing, debugging, and documenting of the developed program.
- Database connectivity and management.
- Used Spring framework, Node.js, JUnit, MongoDB, IntelliJ IDEA, Java, C#, ASP.net, Visual Studio …

IT CERTIFICATIONS

- Spring Boot E-Commerce Ultimate Course
  (Udemy certification 84 hours).

  - Develop a complete shopping website using Java, Spring Boot, Thymeleaf, Bootstrap, jQuery, and MySQL database
  - Spring Data JPA with Hibernate for the data access layer
  - Thymeleaf template engine for creating dynamic view pages
  - Spring RESTful Webservices in conjunction with jQuery on the client side
  - JUnit, Spring Test, AssertJ and Mockito for unit tests and integration tests
  - Google Chart for drawing charts in sales report
  - Spring Mail for sending emails for customer registration and place order confirmation
  - Shopping cart features and payment via PayPal and credit cards
  - Spring Security for authentication and role-based authorization
  - Bootstrap and jQuery for creating responsive, mobile-friendly web pages
  - PayPal Checkout API for payment integration
  - Deploy the application on Heroku cloud platform with file upload on Amazon S3
  - Spring OAuth for single sign on with Facebook and Google

- Professional Java Developer Career Starter: Java Foundations
  (Udemy certification 87.5 hours).

  - Object-oriented programming
  - Testing & Test-Driven Development (TDD) with Junit
  - Regular Expressions
  - Functional programming with Lambdas & Streams API
  - Creating Annotations
  - Reflection API
  - JDBC & SQL
  - Spring Framework

- The Web Developer Bootcamp 2021
  (Udemy certification 63 hours).

  - The ins and outs of HTML5, CSS3, and Modern JavaScript for 2021
  - Use Express and MongoDB to create full-stack JS applications
  - Implement user authentication
  - Create single page applications with AJAX

- Recognize and prevent common security exploits like SQL-Injection & XSS
- Use NodeJS to write server-side JavaScript
- Create a blog application using Node, Express, and MongoDB.
- Deploy your applications and work with cloud databases
- Use NPM to install all sorts of useful packages
- Create your own Node modules

- The Complete Networking Fundamentals Course. Your CCNA start (Udemy certification 79.5 hours)

  - network fundamentals and build simple LANs
  - IP addressing and subnetting
  - hubs, switches, and routers
  - OSI and TCP/IP models
  - Allocating addresses using DHCP
  - Access Control Lists (ACLs)
  - name resolution using DNS
  - Wi-Fi 6 and other Wi-Fi technologies
  - how to protect networks from attacks such as Kali Linux hacks

- Adobe XD Masterclass - UI / UX Design from Scratch (Udemy certification 20 hours).

  - Plan and organize a project
  - Create paper wireframes
  - Create a fully customized website design
  - Animate your web pages using Adobe XD
  - Create micro interactions
  - Adapt your design to make it responsive on different devices
  - Share your designs with clients or stakeholders
  - Share your designs with developers for code
  - Create custom presentations to show off your design

EDUCATION

Bachelor of Science: Computer Engineering, 3.63/4 GPA (144 credit hours)
(Jan/2019-To Present) – (Only one semester remaining to finish)
United Arab Emirates University - Al Ain, Abu Dhabi, UAE

Minor in: Artificial Intelligence, 4/4 GPA (12 credit hours)
(Jan/2019-To Present)

United Arab Emirates University - Al Ain, Abu Dhabi, UAE

PROFESSIONAL TRAINING

- BCI and Neurotechnology Spring School (122 hours)
  12 educational credits | online Training.
- Introduction to Robot OS | online Training
- Introduction to TensorFlow | online Training

Honors:
- Won second place in the UAE University Spring 2022 Programming Contest.
- Dean's List Certifications.
- Jan 2019, Full Scholarship opportunity at UAEU, to complete my undergraduate studies in computer engineering.

Date: 16/07/2022
Place: Al Ain, Abu Dhabi, United Arab Emirates
Yonatan Tesfay.