

Cover Letter

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Dear Hiring Manager,

I am a technology enthusiast with a unique blend of hands-on experience in SQL, PHP, MYSQL, HTML5, CSS3, IBM BlueMix, IBM Watson, ETL (Micro soft SSIS) and Computer Networks. The software developer role provides me an opportunity to leverage my programming skills and apply my education in computer science engineering to create value for your organization.

My key skills and qualifications include the following:

- **Diverse Software Engineering Experience:** I worked as a PHP developer at Dynamites Network and Oliver's learning in Toronto. Prior to current software engineer role, I worked as an assistant professor for 4 years in the department of Computer science at KTVR college of Engineering, India. Through the combination of my academic and developer experience, I was able to master the following areas in the field of software development.
 - Highly skilled in designing, testing, and developing web applications.
 - Thorough understanding of data structures, data schemas, SQL query optimization.
 - Highly skilled in both front end and back-end development
 - Highly knowledgeable in software development life cycle.
- **Analytically Driven:** My core strength lies in breaking down complex problems to find innovative solutions. This skillset has helped me in my current job to build the artificial intelligence web platform for auto insurance. Building the Artificial Intelligence platform needed extensive analysis and exploration of IBM Bluemix and Watson services and my inquisitive nature has helped me in quickly achieving the objective.
- **Excellent Academic credentials:** I have completed my Engineering and Master in Engineering in Computer science.

I am confident that my skills from my past work experience, Dynamite Networks and knowledge from the Masters in Computer Engineering will enable me to be successful at this role. Thank you for considering my application and I hope to get an opportunity to talk with you further about my experience and qualifications.

Sincerely,

Deepika

OBJECTIVE

I am looking for job opportunities as a **Web Developer** in the following PHP, SQL, HTML, CSS, jQuery, JS, IBM BlueMix, IBM Watson and Computer Networks available at your organization.

KEY ATTRIBUTES

- Web and System Developer with diverse experience in Computer Science and Technologies with strong working knowledge of PHP web application development
- Experienced in engaging with product owners and other stakeholders to create user stories with detailed acceptance criteria
- Proven ability to design and deliver complex applications while delivering high-performance systems
- Demonstrated leadership and team building skills with the ability to thrive under pressure and produce exceptional results
- Possess excellent organizational and time management skills to meet deadlines and work on multiple projects
- Result oriented and willing to learn and apply emerging technologies quickly
- Performing the impact analysis of change requests and new feature developments
- Excellent interpersonal communication, documentation skills and experience coordinating with project managers, business analysts, architects and Testers

EDUCATION

Master of Engineering (M.E., 2012)–Computer Science , Anna University, Coimbatore, TN, India	2010 - 2012
Bachelor of Engineering (B.E., 2010) – Computer Science , Anna University, Coimbatore, TN, India	2006 – 2010
PHP (6 Months) – Hypertext Preprocessor , Appin Certified 2016	
Udemy online Full stack developer 2017-2018	

TECHNICAL SKILLS

- Web Technologies – HTML5, CSS, PHP, JavaScript, jQuery, Bootstrap
- Language – C, VBA
- Operating System – Windows, Linux
- Database – Oracle, My SQL, SQL server, SSIS package
- Methodologies – Agile, Waterfall
- Content Management System - WordPress
- MVC – Laravel (beginner)
- IBM services - Watson discovery, retrieve and rank, compose for MySQL, IBM machine learning, decision optimization and document conversion,

PROFESSIONAL EXPERIENCE

Software Developer, Dynamite Network, Toronto	Feb 2017 – Jan 2018
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Technologies: Front-End: PHP, HTML, CSS, JavaScript, JQuery, SQL, Bootstrap

Back-End: IBM Bluemix Services, MySQL

Responsibilities

- Developed an Auto Insurance web application using PHP front end and IBM Bluemix / Watson/ MySQL as the back end to create an artificial intelligence platform.
- Responsible to co-ordinate with the IBM Analytics team to understand and train various Bluemix artificial intelligence services to handle dynamic queries. Mastered Bluemix services including discovery, retrieve and rank, document conversion, compose for MySQL, IBM machine learning and decision optimization.
- Building testable, reusable PHP modules and suitable MVC design patterns to create an efficient web application.
- Designed UI from inception to final product and successfully launched brand new website for dynamite network.
- Designed relational database in MYSQL and optimized by building indexes for efficient SQL querying.
- Validation of web pages including input format restrictions, data flow validations and error handling.

Technical Lead KTVR College for Engineering and Technology, India

Jan 2012 – May 2016

As an assistant professor of computer science, I was assigned the role of tech lead in the development of web-based virtual office applications for the Engineering institute.

Technologies: HTML5, CSS3, JavaScript, JQuery, SQL, Bootstrap, PHP

Responsibilities

- Managed product deliverables for the web application, spanning product feature development, enhancements, design, customization, deployment and production support.
- This web application provides complete functionality of a simple office, including file transfer, emails, instant messaging, meeting rooms, secretary, lounge, administration etc. all under one interface using PHP.
- Reviewed programming projects and reported statuses to programming managers.
- Performing the responsibilities of implementing and hosting of systems on a web server using cPanel/ FTP/ Hosting.
- Managed updating of content on websites.
- Collaborated with team members in the development of database structure.

Computer Science Asst. Professor- KTVR College for Engineering and Technology, India

Jun 2012 – May 2016

Four years of experience in the department of computer science engineering teaching the following courses

Computer Organization and Architecture: This course addresses fundamentals in computer organization and architecture, and the performance improvement principles in computer design. The course covers the following sub topics

- Basic Structure of Computers: This topic includes Bus structure and its performance, Instructions and Instruction Sequencing and Addressing Modes, Basic Processing Unit
- Arithmetic Operations: Roberston Multiplication Algorithm, Booth's Multiplication Algorithm, Restoring and Non-Restoring Division Algorithm, Multiple Bus Organization, Hardwired Control, Micro Programmed Control, Nano Programming
- Pipelining: Data Hazards, Instruction Hazards, Structural Hazards; Data path and Control Considerations for performance
- Memory Systems: Cache Memories, Virtual Memory, Memory Management Requirements, Secondary Storage Devices
- Input/output Organization: Interrupts, Direct Memory Access(DMA), Interface circuits

Computer Networks: This course addresses the layer in TCP and its functionalities. The course covers the following sub topics

- Physical Layer: Networks Models – OSI, TCP/IP, Transmission Media – Guided, Unguided, switching – Circuit-Switched Networks, Datagram Networks, Virtual-Circuit Networks
- Data Link Layer: Protocols for Noiseless Channels – Simplest Protocol, Stop and Wait Protocol; Protocols for Noisy Channels – Stop and Wait ARR, Go-Back-N ARR, Selective Repeat ARR, Piggybacking; Multiple Access- Random Access - ALOHA, CSMA, CSMA/CD, CSMA/CA; Wired LANs – Ethernet; Wireless LANs - IEEE 802.11, Bluetooth; Devices - HUBS, Repeaters, Bridges, Switches, Routers, Gateway; Backbone Networks - Bus, Star
- Network Layer: Logical Addressing – IPv4, IPv6; Address Mapping – ARP, RARP, DHCP, BOOTP, ICMP, IGMP; and Delivery – Forwarding, Unicast Routing, Multicast Routing
- Transport Layer: Process-to-Process Delivery – UDP, TCP; Congestion Control and QoS
- Application Layer: DNS, E-Mail, File Transfer, WWW and HTTP, Multimedia, Network Security - Cryptography

Fundamentals of Computing and Programming: This course addresses fundamentals in computing and programming, and the act of writing computer program. The course covers the following sub topics

- Introduction: Characteristics of Computers, Evolution of Computers, Computer Generations, Number Systems - Binary, Octal, Decimal, Hexadecimal
- Computer Software: Types of Software, Software Development Steps, Internet Evolution
- C: Constants, Variables and Data Types, Operators and Expressions, Input and Output Operators, Decision Making, Branching and Looping, Functions, Structures and Unions, Pointers, Arrays

Mobile Computing: This course addresses the transmission of data, voice and video through wired and wireless devices. The course covers the following sub topics

- Introduction: MAC Protocols, Wireless MAC Issues - Hidden and Exposed Terminal Problems, Fixed Assignment Schemes – FDMA, TDMA and CDMA, Random Assignment - ALOHA, CSMA, Reservation Based - MACA
- Overview of TCP/IP: Architecture, Adaption of TCP Window
- Mobile Telecommunication System: GSM, GPRS; Mobile Ad-hoc Networks: Ad-Hoc Basic Concepts, Traditional Routing Protocols - Distance Vector, Link State, Routing Protocols - AODV, DSR, DSDV, ZRP, Cluster