***Andrew Laing | BSC (Hons) Computing Graduate***

***Telephone:*** \*\*\*\* \*\*\* \*\*\*\*

***Email:*** \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* ***GitHub:*** [***https://github.com/AndrewLaing***](https://github.com/AndrewLaing)

**PROFESSIONAL PROFILE**

Recent BSc (Hons) Computing graduate available to fulfil the role of Entry-Level Software/Web Developer within a reputable company. Can communicate and develop positive relations with people of all ages, beliefs and abilities. Can work as part of a team or individually to complete tasks quickly and accurately. Motivated to learn and develop core skill set.

**CORE SKILLS**

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| --- | --- |
| * Full Software Development Lifecycle * Version Control * Interface Design * Solutions Development * Debugging and Troubleshooting * Testing and Documentation | * Python, Java, C, C++, VB.NET, VBA for Access * PHP, HTML5, CSS, JavaScript, Bootstrap, AJAX, Django * MS SQL, MySQL * Visual Studio, Eclipse, IntelliJ, PyCharm * Linux, Windows * VirtualBox, CISCO Packet Tracer * Microsoft Office, Active Directory |

**EDUCATION & QUALIFICATIONS**

**CITY OF LIVERPOOL COLLEGE (07/09/2015– 05/07/2019)**

* + **BSC (Hons) Computing (OU Top-up) First Class Honours**

Modules included: Advanced Database Development, Advanced Web Development  
Dissertation, IT Security Management, Network Management and Security

* + **HND Computing and Systems Development – Distinctions in all modules**
  + **HNC Computing and Systems Development – Distinctions in all modules**
  + **BTEC 90 Credit Diploma (Level 3) I.T. Practitioners – Double Grade D\*D\***

**GREENBANK COLLEGE (01/09/2014 – 22/07/2015)**

* **OCR Level 2 Certificate in I.T. User Skills (iTQ)**
* **Level 1 NVQ Certificate in Business and Administration (City and Guilds)**

**DEGREE PROJECTS**

**DISSERTATION PROGRAMMING PROJECT**

**Summary:** Dissertation project. Design, implementation and testing of an artificial conversational agent (chatbot) capable of being used in conjunction with therapy to increase ADHD sufferers’ levels of attentiveness. UI/UX design with usage scenarios, storyboards and avatar design. Object Oriented Programming. Modular design. Integration of third-party multimedia and AI libraries. Documentation including class references.

**Technologies used:** Python, PyGame, PyAIML, AIML ALICE library, Microsoft SAPI, PyInstaller and Inno Setup for creating a single executable installer, PyCharm IDE, Notepad++, GIMP image editing, Audacity audio editing, ProjectLibre (Open-source project management.)

**CINEMA BOOKING SYSTEM DATABASE**

**Summary:** The design, implementation and testing of a substantial Microsoft SQL Server relational database and set of stored procedures and functions for the backend of a cinema booking system. Design documentation including HTML table and procedure references, and entity relationship diagrams. Stored procedures written to provide booking statistics. SQL scripts written to generate large random test dataset and perform unit tests on procedures and functions created during the project.

**Technologies used**: SQL, Microsoft SQL Server Management Studio, MS Access 2016 (for designing and prototyping the tables), MS Word 2016, Notepad++, ProjectLibre.

**PROTOTYPE ONLINE FOOD ORDERING SYSTEM**

**Summary:** The design, implementation and testing of a food ordering website with a MySQL database and PHP backend. User needs analysis. Page design including storyboards. MySQL table creation scripts and stored procedures including reference documentation. Use of parameterised queries. User input sanitation. W3C Web Content Accessibility Guidelines 2.0 compliancy testing. Tests using portable XAMPP server.

**Technologies used:** PHP, HTML5, CSS3, BootStrap, JavaScript, AJAX, MySQL, Notepad++, PHPMyAdmin, MySQL Workbench, GIMP, Word 2016, Microsoft Project.

**COLLEGE HE STUDENT ACTIVE DIRECTORY DOMAIN**

**Summary:** The design, implementation and testing of an Active Directory (AD) domain for higher education students. Set up and configuration of an AD Domain controller on Ubuntu Server. Server security configuration including automated scans. Apache webserver configuration. CISCO network devices configuration. Group policy creation from a Windows 10 machine attached to the domain. Configuration testing using virtual machines.

**Technologies used:** Ubuntu Server 18.04.2 LTS, Windows 10, AD Domain Management tools, Samba, Tripwire Intrusion Detection, Lynis universal security auditing tool, ClamAV, Apache Server, ModSecurity, PHP, PHPMyAdmin, VirtualBox, Packet Tracer network simulation tool.

**AWARDS AND RECOGNITION**

**CISCO CCNA Routing and Switching: Introduction to Networks –** Letter of Merit **City of Liverpool College -** Outstanding Research Activity Certificate

**INTERESTS**

**Interests:** In my spare time I enjoy reading, solving puzzles, learning new programming languages, following the latest developments in technology, walking, cycling, drawing, and playing MMORPG video games.