# Be an AI Applications Developer



ECLAAS Digital Skills Accelerator





100+ Pan-Asia

Campuses

>2,000 Enterprises

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# **AI Applications Developer Career Prospect**

#### Why Pursue an AI Applications Developer Career?

80% of organisations in the Asia-Pacific region find it difficult to fill up IT vacancies with software developers being at the top of the list<sup>1</sup>. The demand is so overwhelming that some companies are even raising software developer salaries up to 32% to compete for the right talent, further cementing these software experts as one of the most sought-after tech talents in the world today.

Jobs such as pursuing a career as an AI Applications Developer are high in demand with opportunities that will be pursued in different countries worldwide. According to Statista's projections, the global market for AI will record a compound annual growth of 27.67 percent between the years 2025 and 2030, which will equate to a market volume of something close to \$826.70 billion by the year 2030.

#### **Job Scope for AI Applications Developer**

You will be responsible for designing, building, and deploying intelligent applications for real-life problems by assessing software or user requirements and identifying the best development approach. You will develop secure and scalable software applications that prioritize customer satisfaction and user requirements, covering UI/UX, front-end, middleware, and back-end components.

You will also strategize and execute appropriate testing methods, procedures, and tools to ensure the reliability and functionality of the application meets the user's expectation.

#### **Pay & Prospects for for AI Applications Developer**



Resource: Glassdoor - Front End Web Developer

Resource: Glassdoor - Full Stack Software Developer



# **Better & Faster Skills-First Work-Integrated Learning Journey**

#### **Better Capability Outcomes with Skills-First Work-Integrated Learning**

The Skills-First Work-Integrated Learning approach bridges the gap between education and employment by engaging learners in industry-relevant projects that reflect real-world challenges. This hands-on methodology builds practical, job-specific skills while fostering digital proficiency and critical professional competencies.

Through project-based learning, participants gain expertise in solving practical business challenges and creating innovative solutions, while also developing professional portfolios that showcase their capabilities. This approach prepares learners for a seamless transition into a variety of roles across industries, ensuring they meet the dynamic demands of today's workforce.



#### Faster Career Outcome with Personalized Adaptive Learning Journey



The Personalized Adaptive Learning Journey enables learners to achieve career goals faster through flexible, self-paced modules, collaborative group projects, and personalized mentoring. Aldriven tools tailor learning pathways to individual needs, allowing participants to acquire both foundational and advanced skills efficiently.

By integrating real-world projects into the curriculum, learners accelerate their mastery of key competencies while simulating workplace dynamics to develop technical and interpersonal skills. This adaptable approach ensures learners are equipped to advance their careers quickly and confidently in an evolving job market.



# Rapid AI Application Developer Career Progression with Stackable Credentials

#### **Stackable Skills & Degree Credentials**

The program provides learners with stackable skill certifications that align with specific job competencies. Each module equips participants with specialized skills, validated by professional certifications. These certifications build cumulatively, leading to advanced qualifications such as professional diplomas and applied master's degrees. This stackable approach ensures learners can seamlessly progress through their career paths while achieving industry-recognized credentials.

#### **Professional Certificate Skills Outcome**

The Professional Certificate Program develops the essential skills to develop AI-driven applications, integrating generative AI and frontend development. Participants will gain practical expertise in web design, database implementation, and AI tools to build user-friendly and intelligent applications, enabling them to enter the job market in roles such as AI developer, machine learning engineer, or data analyst, and gain an early footing in the industry.

#### **Professional Diploma Skills Outcome**

The Professional Diploma Program equips learners to design and implement enterprise-grade software, offering hands-on expertise in web development, enterprise applications, agile project management, and capstone projects, preparing them for mid-level roles such as AI Applications Architect, AI Solutions Consultant, and Technical Lead.

#### **Applied Master's Degree Skills Outcome**

The Applied Master's Degree program focuses on advanced computer science topics like systems security, cryptography, and real-world applications. Through advanced modules and a thesis, learners gain practical skills for senior roles in technology, such as AI project manager, head of AI development, and AI strategist, positioning them as leaders in AI.







# **Professional Certificate in AI Application Development**

#### Duration: 4 months

**Course Brief:** This program equips learners with the skills to develop AI-driven applications, integrating generative AI and front-end development. Participants gain practical expertise in web design, database implementation, and AI tools to build user-friendly and intelligent applications.

#### **Modules Coverage**

Module	Learning Summary
Programming Foundations	Develops a foundation in programming, teaching efficient coding and problem-solving for software component development. Gain skill in modules such as: Programming Basics, Object-Oriented Programming, Testing, and Documentation.
Front-End Development	Equips learners with tools to create interactive, responsive web interfaces with optimal user experiences. These modules include HTML, CSS, Bootstrap, JavaScript, Single Page Applications, Testing
Database Design and Implementation	Focuses on designing and optimizing databases for efficient data management in AI applications by learning Database Concepts, Normalization, NoSQL, Testing, and Maintenance.
Generative AI - Design & Development	Teaches integration of generative AI for content creation, enhancing applications with AI-driven interactivity through modules such as: Prompt Engineering, GitHub Copilot, AI Content Generation, Application Development, Testing.

#### Course Knowledge, Skills & Ability Summary

#### **Knowledge:**

- Gain proficiency in programming languages commonly used in AI development.
- Understand the principles of machine learning, including supervised and unsupervised learning, and how to apply algorithms to real-world data.
- Learn techniques for processing and analyzing human language data, enabling the development of applications like chatbots and AI-driven assistants.
- Explore methods for enabling machines to interpret and process visual information from images and videos.
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#### Skills:

- Proficiency in creating and deploying Alpowered applications.
- Ability to implement machine learning models to solve business challenges.
- Create language-based AI systems such as virtual assistants and chatbots.
- Build AI tools capable of recognizing images and video patterns.
- Prepare datasets for machine learning and visualize data trends.

#### **Ability:**

• Develop innovative, ethical, and impactful AI solutions for businesses and industries.

# **Professional Diploma in Full Stack Software Development**

#### Duration: 4 months

**Course Brief:** This program equips learners with the skills to design and implement enterprise-level software applications. Participants will gain hands-on expertise in web development foundations, enterprise application creation, agile project management, and capstone application projects.

#### **Modules Coverage**

Module	Learning Summary
Web Development Foundations	Provides foundational knowledge to create scalable web applications, integrating design patterns and database interactions. These modules include SDLC & Technical Design, Back-End Development, Design Patterns, Framework-Based Development, Testing & Documentation
Develop Enterprise Applications	Focuses on building robust enterprise applications that enhance operations through automation and efficiency. It focused on Enterprise Architecture, Business Logic, UI Development, API Integration, Testing, Deployment, and Maintenance.
Agile Project Management	Teaches agile methodologies to lead and manage full-stack web development projects effectively. Gain skills through modules: Scrum Methodology, Agile Metrics, Workflow Optimization, Team Building, Sprint Management, Continuous Improvement.
Capstone Project	Provides a real-world project to apply the acquired skills in building and deploying a scalable web application. These modules include Application Design, Development, Testing, Deployment, Maintenance.
*RPL may lead to the award of a Professional Certificate	or Professional Dialoma upon successful completion

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#### Course Knowledge, Skills & Ability Summary

#### Knowledge:

- Understanding the end-to-end process of planning, developing, testing, and deploying software applications.
- Gaining knowledge of both client-side (front-end) and server-side (back-end) development principles.
- Learning key concepts in programming using essential languages like JavaScript, Python, and more.
- Acquiring the knowledge to build secure applications, ensuring the protection of user data and privacy.
- Gaining an understanding of Agile principles and how they apply to software development workflows.

#### Skills:

- Building responsive, interactive web applications using HTML, CSS, and JavaScript.
- Writing clean, maintainable, and functional code using frameworks.
- Developing the ability to test and debug applications to ensure optimal performance and security.
- Mastering Git and GitHub for version control and collaboration on coding projects.
- Collaborating with team members using agile tools and processes, including Scrum and sprints, for effective project management.

#### Ability:

• Design, develop, and deploy end-to-end enterprise applications, demonstrating proficiency in problemsolving, critical thinking, and adaptability to emerging technologies. They are also equipped to lead development teams and collaborate effectively in cross-functional projects.

# International Master's Degree in Computer Science (Top-Up)

#### Duration: 6-12 months

**Course Brief:** This program equips learners with comprehensive knowledge in computer science, emphasizing systems security, cryptography, and real-world applications. Through advanced modules and a final thesis, learners develop practical and analytical skills for high-level roles in technology and cybersecurity. Graduates will earn a Master Degree in Computer Science, awarded by Guglielmo Marconi University or University of Roehampton.

#### **Modules Coverage**

Module	Learning Summary
Security	Learners gain expertise in securing systems, employing encryption, and identifying vulnerabilities in web-based applications through modules: Systems Security, Cryptography, Web Security, Block Cipher Algorithms.
Final Thesis	Learners address business challenges through analytical tools and practical solutions, showcasing master's-level expertise. It will focused on Real-World Business Case, Analytical Tools, Practical Solution Design, and Knowledge Application.

#### Course Knowledge, Skills & Ability Summary

#### **Knowledge:**

- Develop a solid understanding of programming principles to build a strong base for software development.
- Learn web design principles, including HTML, CSS, responsive design using Bootstrap, JavaScript, and jQuery, to create interactive and user-friendly web interfaces.
- Gain expertise in database management, including design principles and implementation strategies, to effectively handle and secure business information systems.
- Explore the fundamentals of generative AI models and tools like OpenAI, enabling the integration of AI-driven features into software applications.
- Master software assessment, tool selection, secure application development, testing execution, and problem-solving to ensure the development of robust and secure software solutions.

#### Skills:

- Proficiency in foundational programming concepts and languages.
- Mastery of web development technologies such as: HTML, CSS, and JavaScript.
- Capability to build user-friendly and visually appealing web interfaces.
- Skills in designing and implementing database structures.
- Expertise in application testing, debugging, and secure coding practices.

#### **Ability:**

• Equips learners with practical skills in programming, front-end design, database management, AI integration, and software security, alongside soft skills like problem-solving, collaboration, and project management. Graduates are prepared for roles such as Full Stack Developer, AI Specialist, and Software Engineer, ready to tackle industry challenges effectively.



## eduCLaaS Career Services



The eduCLaaS Talent Hub bridges the gap between education and employment, providing graduates with a seamless transition into the workforce. As a centralized platform, it connects learners with employers for both consulting and permanent roles, ensuring immediate application of skills gained. The Talent Hub supports career development through skill assessments, personalized career path planning, and interview preparation.

By integrating training, placement, and ongoing career support, the eduCLaaS Talent Hub empowers learners to achieve rapid, impactful career outcomes in a competitive global market.

#### Secure your newly launched digital job with our Job Placement Support

Get assistance to improve your chances of securing your desired digital job, backed with more than 10 years of track record and built upon a strong relationship with over 2,000 companies.



# About eduCLaaS

eduCLaaS is at the forefront of bridging the global digital skills gap. We are committed to empowering individuals and enterprises to thrive in an everevolving digital economy.

### Our Mission: Empowering Growth in the Digital Economy

Our mission is clear: to close the skills gap by integrating education with industry needs. We prepare learners for the demands of the digital economy while helping organizations overcome workforce challenges. Through this, we foster innovation, competitiveness, and inclusivity.

#### Our Vision: A Borderless Digital Learning Ecosystem

eduCLaaS envisions a future where learning and work converge seamlessly. Our inclusive, global platform ensures equitable access to digital skills, empowering individuals and enterprises to succeed regardless of geographical boundaries.

#### What Makes eduCLaaS Unique?



**Skills First Approach:** We focus on delivering job-ready skills directly aligned with market demands.



**Flexible Pathways:** From foundational certificates to advanced master's degrees, we offer adaptable programmes for all career stages.



**Work-Integrated Learning:** Realworld projects and mentorship ensure learners gain practical expertise.

#### **Our Offerings:**



# Higher Education CLaaS®

Innovative, flexible pathways like the K-12 + Diploma programme and International Foundation Diploma to align learning with career readiness.



# Lifelong CET CLaaS®

Comprehensive upskilling and reskilling programmes for both non-tech and tech professionals.



#### **Enterprise Digitalization CLaaS®**

Tailored solutions to empower SMEs and large corporations with digital transformation strategies.



# **ECLáaS**

# Bridging Digital Divide with ClaaS<sup>®</sup>

We aim to bridge the missing connection between education and the workplace by fostering a tripartite partnership across public, private, and non-profit sectors, to recontextualize education as a global common good for lifelong applied learning delivery, to develop future-ready talents and enterprises in the glocalized digital economy

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