

ONLINE CERTIFIED PROGRAM

AI-Powered Full Stack Web Developer Full-Time Bootcamp

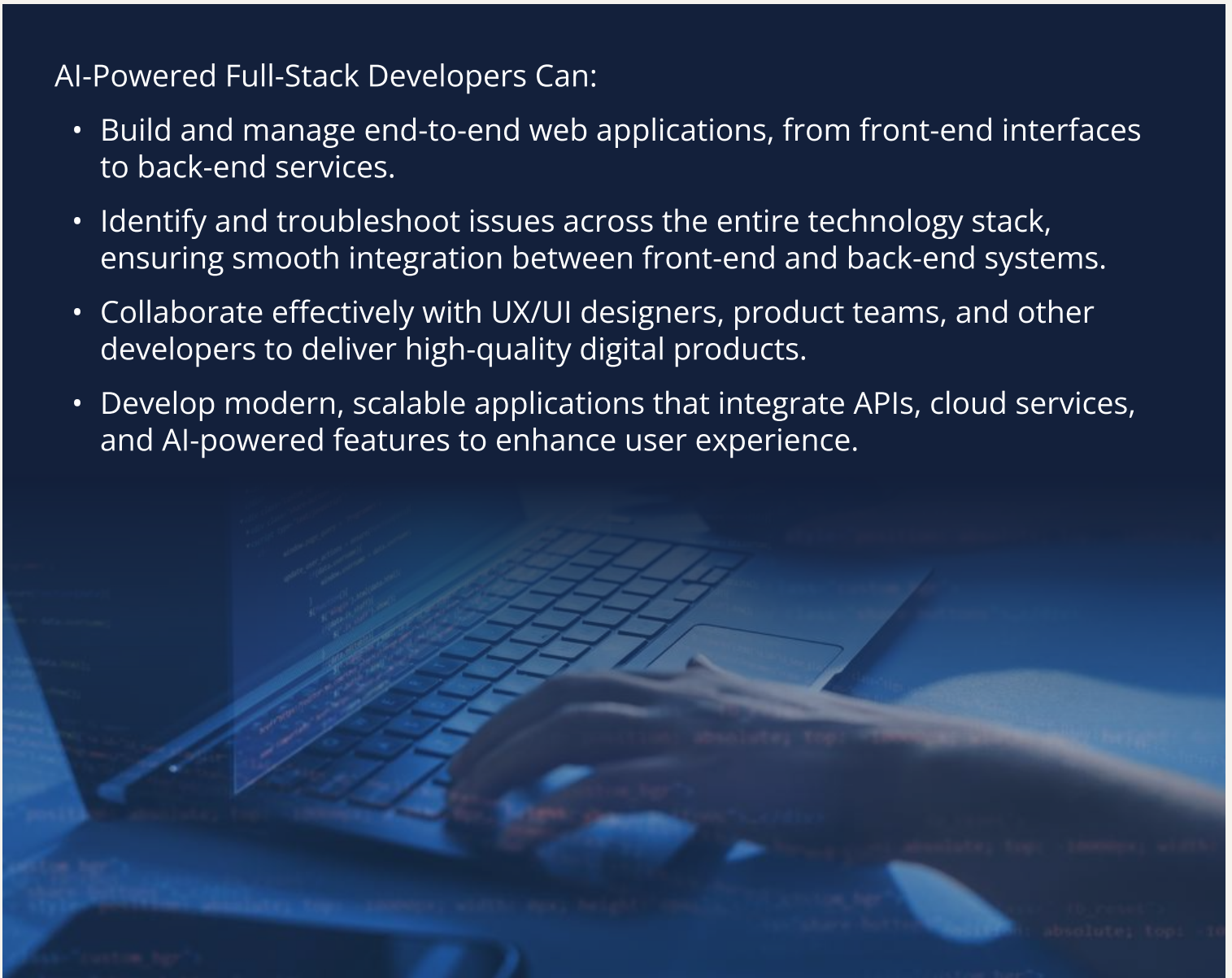
An Interactive and Experiential Approach.



The demand for developers continues to grow as organizations increasingly build AI-enabled digital products and scalable web platforms. Companies are especially seeking full-stack developers who can work across the entire technology stack—from building responsive front-end interfaces to developing back-end services and integrating modern tools and AI technologies. The AI-Powered Full Stack Web Developer Bootcamp prepares learners with the practical skills needed to develop, deploy, and maintain modern web applications in today's AI-driven tech landscape.

AI-Powered Full-Stack Developers Can:

- Build and manage end-to-end web applications, from front-end interfaces to back-end services.
- Identify and troubleshoot issues across the entire technology stack, ensuring smooth integration between front-end and back-end systems.
- Collaborate effectively with UX/UI designers, product teams, and other developers to deliver high-quality digital products.
- Develop modern, scalable applications that integrate APIs, cloud services, and AI-powered features to enhance user experience.



Who Is This Program For?

If you're interested in launching a career in modern web development and want to learn how to build AI-powered applications from front end to back end, this bootcamp is for you.

This program is a great fit if you:

- ✓ Want to learn how to design, develop, and deploy full-stack web applications.
- ✓ Have little or no prior experience and want to build practical development skills from the ground up
- ✓ Are interested in building responsive user interfaces and working with modern front-end technologies.
- ✓ Want to learn how to develop APIs, work with databases, and build scalable back-end systems.
- ✓ Are excited to work with modern development tools, cloud services, and AI-powered technologies



UI/UX



back-end



front-end

Roles include:

- *AI-Enabled Web Developer*
- *Full-Stack Developer with AI Integration*
- *Web Application Developer*
- *Full-Stack Web Developer*
- *AI Application Developer*
- *Solutions Architect*

An Interactive and Experiential Approach

By the end of this AI-Powered Full Stack Web Developer Bootcamp, you will have built and deployed your own modern, data-driven web application while mastering both front-end and back-end development. Throughout the program, you will gain hands-on experience working with APIs, databases, and modern development tools, while learning how to integrate AI-powered features into web applications. These practical skills will prepare you to launch a career as a full-stack developer capable of building intelligent, scalable digital solutions.



An interactive educational experience with RoboGarden's game-based platform.



100% online, synchronous learning.



Preparing students for the freelance world.



Gain in-demand skills from experts who will prepare you for the real-world industry.



60+

Live
Sessions



1

Capstone
Project



8

Industry
Speakers



11

Learning
Weeks



450

Course
Hours



25

Self-study
Hours Per
Week

Program Curriculum

To build modern AI-powered web applications, students will progress through 10 structured modules designed to guide them through the entire development lifecycle. They begin by learning how to plan and conceptualize digital products, then move into designing interfaces, developing front-end and back-end systems, working with APIs and databases, and integrating AI-powered features. The program concludes with testing, optimizing, and deploying a fully functional web application, giving students practical experience in launching real-world solutions.



10
Modules

- ✓ Apply software methodology to create an application.
- ✓ Create a user interface using HTML, CSS, and JavaScript.
- ✓ Create a cross-platform mobile application using the Ionic framework.
- ✓ Recognize how apps are deployed and sold via Google Play and Apple App Store.
- ✓ Complete a Capstone project that demonstrates proficiency in developing a real mobile application and publish it on different mobile app stores.



HTML



CSS



React



Node.js



Python

Program Curriculum cont.



Online, synchronous course delivery with scheduled live instructors appearing via leading virtual classroom technology.



Students will learn to build an app from concept to design by playing with code on RoboGarden's game-based platform, enabling them to discover the skills they need to build a mobile and web application.



Program Curriculum cont.

Module 1

Web Development Basics

- ✓ Learn the fundamentals of HTML and CSS to build and style web pages.
 - ✓ Get introduced to JavaScript basics and core web development concepts.
 - ✓ Understand responsive web design, including images, typography, and layout .
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Module 2

AI in Web Development

- ✓ Explore how AI enhances web development through automation, personalization, and smart user experiences.
 - ✓ Learn how AI tools can support coding, design, testing, and content generation.
 - ✓ Understand practical use cases for integrating AI into modern websites and web app.
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Module 3

AI Assisted Backend Development with Node.JS & MySQL

- ✓ Learn how AI tools assist backend development using Node.js and MySQL.
 - ✓ Explore AI-supported database design, query optimization, and API development.
 - ✓ Understand how to build smarter, more efficient backend systems with AI assistance.
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Module 4

Single Page Application using Angular

- ✓ Understand the fundamentals of Single Page Applications (SPAs) and how they work.
- ✓ Learn how to build dynamic, component-based applications using Angular.
- ✓ Explore routing, state management, and seamless user experiences in SPAs.

Program Curriculum cont.

Module 5

Single Page Application using Angular and React JS

- ✓ Understand the fundamentals of Single Page Applications (SPAs).
 - ✓ Build dynamic, component-based applications using Angular and React JS.
 - ✓ Learn routing, state management, and modern front-end development practices.
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Module 6

Single Page Application using React JS

- ✓ Understand the fundamentals of Single Page Applications (SPAs).
 - ✓ Build dynamic, component-based applications using React JS.
 - ✓ Learn routing, state management, and modern front-end development practices.
-

Module 7

Cross Platform Application React Native

- ✓ Understand the fundamentals of cross-platform mobile application development.
 - ✓ Build mobile apps using React Native for both iOS and Android.
 - ✓ Learn how to create responsive, high-performance mobile experiences with a shared codebase.
-

Module 8

Web & App Deployment

- ✓ Learn the process of deploying websites and mobile applications to production.
- ✓ Explore hosting options, domain management, and server configurations.
- ✓ Learn best practices for launching and managing web and app projects.

Program Curriculum cont.

Module 9

Portfolio Builder

- ✓ Include basic project information and general specifications
 - ✓ Relate the project concept to current and future industry demands
 - ✓ Positively impact on graduate resume
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Module 10

Learn to Earn

- ✓ Project presentations
 - ✓ Employment preparation
 - ✓ Freelance preparation
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Hands-on Experience

Case-Based Learning

Understand and develop the necessary skills to navigate real-world development challenges

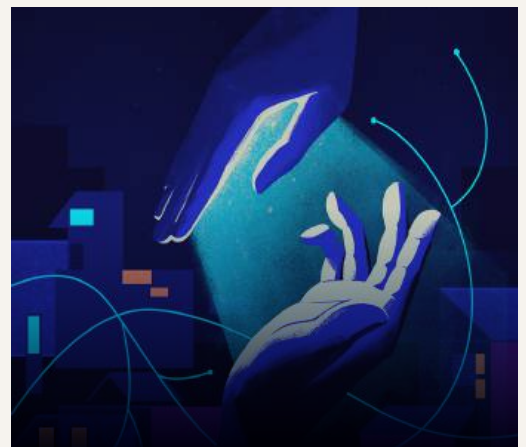
1. Dynamic cases challenge learners to assess how developed skills can be applied to the real world.
2. Varied exercises and mini projects create learning opportunities to practice creative problem solving.
3. Transition newly developed skills from the bootcamp and translate value to business environments.



Game-Based Learning

Acquire skills by interacting with our gamified platform

1. Our game-based platform encourages continuous learning from best-in-class industry experts.
2. Introducing students to professional development environment.
3. Solve challenges built on game-based methodology.



Career Advisors

Learn to earn

1. Get first-hand industry insight from experts in a variety of sectors.
2. Gain in-demand skills and experience from experts.
3. Get prepared for real-world industry demands.



Hands-on Experience Cont.



Post-Program Support

Maintain contact after completion of the bootcamp

1. Offer additional learning opportunities.
2. Provide updates of changes in technologies.
3. Help students to offer the latest innovative technology expertise to the market.



Personalized Learning Path

Special assessment tools for students

1. Assess personal interests.
2. Recommend the most suitable learning path for the student.
3. Direct the student based on the student's programming experience.

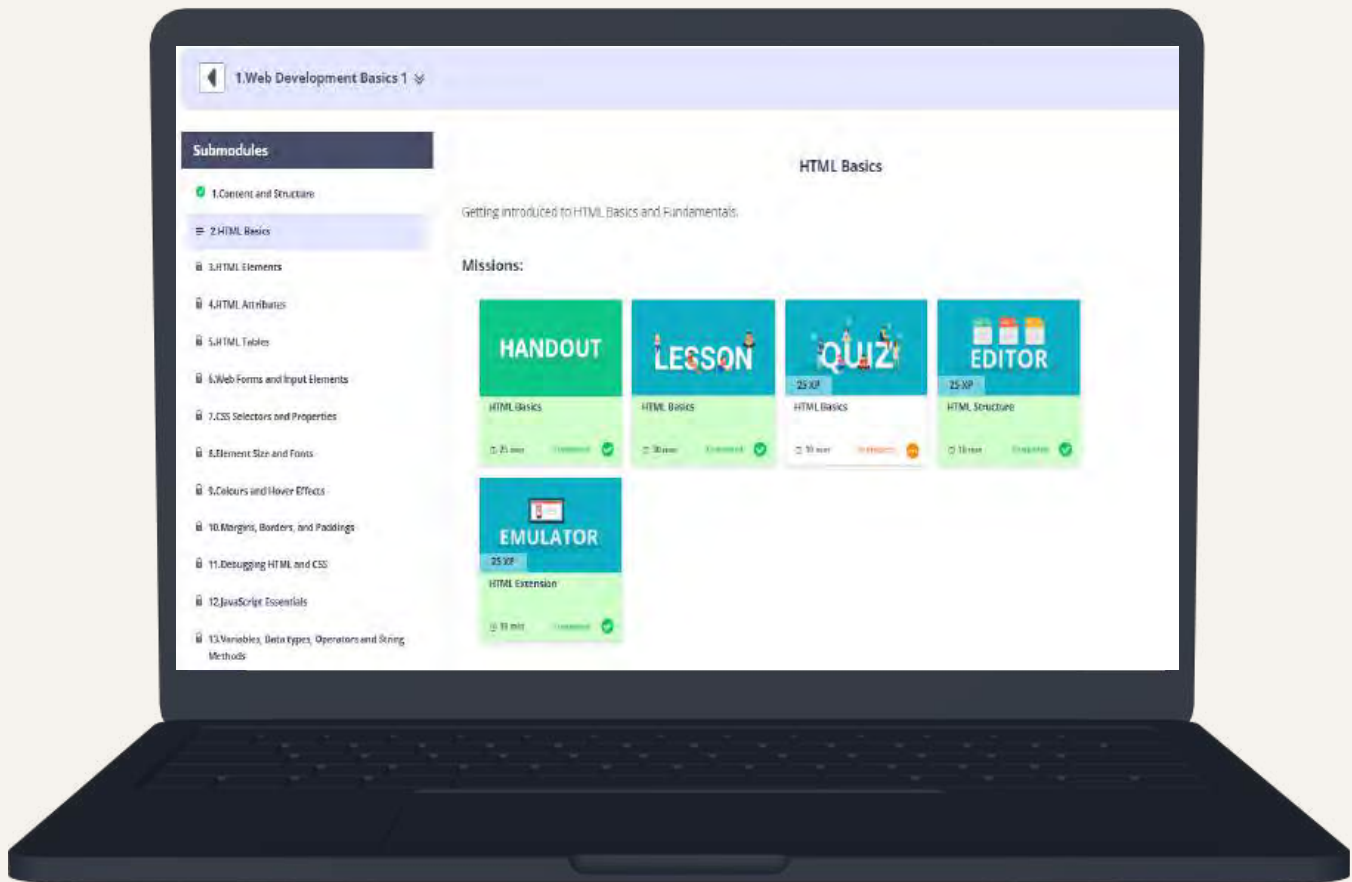


Online Paced Learning

100% online, synchronous-paced learning

1. Scheduled live sessions with instructors and teaching assistants.
2. Online teaching assistant available to students outside of live session time.
3. Student schedule will be divided between online sessions and self-study hours.

Hands-on Experience cont.



Game-based: Increase experimentation and strengthen skills through game elements.



Case-based: Understand coding concepts based on real-world challenges.



Practice-based: Have opportunities to apply what you learn and validate your skills.

— Designed And Taught By Experts.



Jordan Doerksen

Teaching Staff

A Full Stack Expert and Instructor at RoboGarden who develops industry-standard software to help solve real-world problems. Jordan has also been teaching software development for 9 years.

- *Developed industry-standard software to solve real-world problems.*
- *Built native applications for Windows, iOS, and Android.*
- *Developed software currently being used in healthcare, oil & gas, and education industries.*



Emmanuel Onu

Teaching Staff

Instructor at RoboGarden with more than 8 years of experience as a Full Stack Web Developer working on several cutting-edge projects. Emmanuel has a key interest in privacy and security issues with the IoT when it comes to computer science.

- *Worked on several cutting-edge projects.*
- *Has bachelors and masters degree in computer science.*
- *Completed a PhD in computer science.*



Fatemeh Yazdanbakhsh

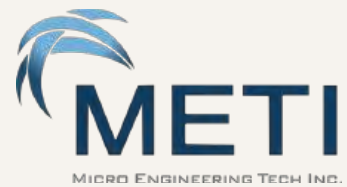
Teaching Staff

Instructor at RoboGarden since 2019, Fatemeh is a PhD candidate at the University of Calgary in the field of Computer Graphics. She has more than 4 years experience in teaching full stack development, machine learning, and Python courses.

- *Works with 3D medical images and surgery rehearsal platforms creation.*
- *Has masters degree in the field of Artificial Intelligence from Shahid Beheshti University, Iran.*
- *Part of RoboGarden teaching team and is a subject matter expert.*

Our Teaching Staff

Our Industry Speakers Are From World-Class Corporations



Certificate of Completion



Trusted by Leading Universities & Colleges

