

CURRICULUM DEVELOPMENT AND TEACHING OPPORTUNITIES



CERTIFICATE IN MACHINE LEARNING

The University of Washington is proud to be one of the nation's premier educational and research institutions. UW Professional & Continuing Education, delivered by Continuum College (UWC²) offers certificate programs and degrees to working professionals in the evenings, weekends and online.

UWC² has a range of outstanding opportunities for instruction and curriculum development for the three courses within the:

CERTIFICATE IN MACHINE LEARNING

This program is designed to train adult, professional learners in Machine Learning techniques. At the end of the program, successful graduates should be able to apply for Machine Learning engineer and scientist positions.

The program has an application focus, with students learning widely used methods, in a hands-on, practice-heavy curricula. The final course teaches students cutting-edge applications including Deep Learning, Natural Language processing etc.

INSTRUCTIONAL AND CURRICULUM DEVELOPMENT ROLES

There are three types of roles available. All roles are part-time and designed to accommodate professionals who work during business hours. Please see tables below for specific openings.

- **Course Developer** – Share your expertise by developing content for one of three courses like videos, assignments, labs, Kaggle competitions and assessments.
- **Course Instructor** – Share and improve your skills by teaching a set curriculum in any one of three formats described above.
- **Instructional Assistant** – Develop your knowledge and experience by serving as an instructional assistant to coach and teach students online or in the classroom.

FOUR FORMATS

This program is offered in four formats:

- **Online, self-paced** –Students start any time and move through at their own pace with up to 4 months to complete each course. There are no class meetings or fixed deadlines.

- **Online, group-paced** – Students start and finish program as a group with opportunities to interact with instructors and classmates through real-time office hours, discussion boards and projects. Assignments have fixed deadlines.
- **Classroom** – Students attend class in downtown Seattle or Bellevue one night a week.
- **Accelerated** – Students meet twice a week compressing the program to 5 months in a classroom setting.

COURSE TOPICS AND JOB OPENINGS

Course 1: Introduction to Machine Learning

Topics	Currently Open Opportunities
<ul style="list-style-type: none"> • Foundational concepts of maths and Statistics • Linear models • Nearest neighbor models • Graphical models • Generalized additive models • Features selection and model tuning • Regularizations • Normalization and dimensionality reduction 	<p>Developer positions Flexible between June 2018 and February 2019</p> <p>Instructor and Instructional Assistants Multiple positions starting Fall 2018</p>

Course 2: Advanced Machine Learning

Topics	Currently Open Opportunities
<ul style="list-style-type: none"> • Bootstrap aggregation • Gradient boosting (CRFs) • Support vector machines • Stacking and blending • Clustering • Natural Language Processing • Recommendation Systems • Forecasting 	<p>Developer positions Flexible between June 2018 and February 2019</p> <p>Instructor and Instructional Assistants Multiple positions starting Winter 2019</p>

Course 3: Applied Machine Learning

Topics	Currently Open Opportunities
<ul style="list-style-type: none"> • Gradient descent and adaptive gradient descent • Backpropagation • Multi-layer perceptron models • Deep from shallow learning • Momentum • Convolutional neural network 	<p>Developer positions Flexible between June 2018 and February 2019</p> <p>Instructor and Instructional Assistants</p>

<ul style="list-style-type: none"> • Embedding models • Recurrent neural network 	Multiple positions starting Spring 2019
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SKILLS AND EXPERIENCE REQUIRED

- Seven to eight years of industry experience in machine learning or data science with increasing responsibility
- Ph.D. or post-doctoral work in relevant field preferred
- Teaching experience preferred
- Legal authorization to work and receive compensation in the United States

Note: To qualify for Instructional Assistant, you don't need to have as many years of experience as indicated above.

APPLY TO TEACH

Interested applicants should send a resume or LinkedIn profile and letter of interest describing relevant experience, preferred course and role to the Program Manager, Piyu Roy, piyuroy@uw.edu.