



DBT sponsored National Workshop on Skill Development Programme in Bioinformatics: Biological Data Curation using Web Services & Utilities

March 14-17, 2018

Organised by: Bioinformatics Centre, Savitribai Phule Pune University, Pune

Preamble

In the post-genomic era, biology has been transformed into a Big Data Science. Large volumes of data are deposited in various databases developed and hosted by major bioinformatics resources such as NCBI, UniProtKB, EMBL, PDB, KEGG, PubChem etc. These resources provide access to data through search engines and query systems. However, curation of large data sets could be time consuming. Therefore, these resources provide a set of web services and utilities for programmatic access to facilitate data curation for the purpose of analysis and knowledge discovery. The web services provide structured interface that can be easily embedded in any scripting language to enable customized data extraction and automated download.

The participants will be introduced to the web services and utilities of major bioinformatics resources. The hands on sessions will involve case studies on how to: use web services, parse the results and create pipelines for customized and advanced data curation.

About the Centre

Bioinformatics Centre at Savitribai Phule Pune University (formerly known as University of Pune) was established in 1987 as a Distributed Information Centre (DIC) under the BTISNetwork of the Department of Biotechnology (DBT), Govt. of India and recognized as a Centre of Excellence (CoE) since 2002. The Centre offers Masters and Doctoral programmes in Bioinformatics. The Centre is known for its contributions in R&D and has developed several algorithms, servers and databases which are extensively used by the scientific community and have made a significant impact nationally and internationally. The Centre has an impressive record of publications, citations and usage statistics for its servers and databases. The bioinformatics resources developed at the Centre are available at <http://bioinfo.net.in>.

Workshop Objectives

Knowhow of existing web services and utilities is an important skill to acquire in the era of high-throughput analyses in the field of bioinformatics. This workshop will focus on the application of web services and utilities for advanced data access, curation, customization and integration.

Contents

- Biological data curation: Need and significance
- Web services & utilities of major bioinformatics resources
- Customized data extraction pipelines
- Coding wrapper programs for customization

Speakers

- Dr. T. Madhan Mohan (Department of Biotechnology, New Delhi)
- Dr. Mohan Kale (Dept. of Statistics, S. P. Pune University)
- Dr. V. K. Jayaraman (CMS, S. P. Pune University)
- Dr. Manasi Patwardhan (TCS Research Labs, Pune)
- Dr. R. R. Joshi (CDAC, Pune)

Faculty

- Ms. Smita Saxena
- Mr. Rajiv Karbhal
- Dr. Sangeeta Sawant
- Dr. Urmila Kulkarni-Kale

Workshop Coordinators

Dr. Urmila Kulkarni-Kale & Ms. Smita Saxena

Convener

Dr. Sangeeta Sawant (Director)

Target Audience

Coordinators and technical personnel working at the BTISnet Centers; Ph.D. students, researchers and scientists from academia and industry working in the field bioinformatics/ computational biology.

Mode of Training

The workshop will consist of lectures, demos and hands-on sessions.

Prerequisites

Knowledge of basic bioinformatics, operational familiarity with major bioinformatics databases, experience of coding with any scripting language and the need for high throughput data curation.

Number of Participants: 30

BTISnet members need to submit nomination letter with application.

Important Dates

Online application begins: Feb 5, 2018
Online application ends: Feb 24, 2018
Submission of hard copy: Feb 26, 2018
List of selected participants: Feb 28, 2018
Accommodation request: March 5, 2018

Registration details

Rs. 5000 to be paid by Demand Draft (of any nationalized bank) drawn in favour of "Finance and Accounts Officer, Savitribai Phule Pune University" payable at Pune. The registration fee includes course material, working lunch, tea/ coffee. Please note that the registration fee doesn't cover accommodation charges.

Accommodation

Accommodation on SPPU campus will be made available upon request. The charges are to be borne by the participants.

Mode of Application

Online registration facility and instructions are available at:
<http://bioinfo.net.in/bdcws2018>

Contact Details

Workshop Coordinators (BDC)
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