

*Report on*  
"Spoken Tutorial - Python 3.4.3 (for BCA)"

by the National Mission on Education  
through Information and Communication Technology (ICT),  
launched by Ministry of Education,  
erstwhile Ministry of Human Resources and Development,  
Government of India.

**Title of the Course:** “Spoken Tutorial – Python 3.4.3 (for BCA)”

**Total Contact Hours:** 7 hours

**Mode of Registration:** Online

**Date for Commencement of the Course:** Nov 15, 2022

**Closing of the course:** Dec 15, 2022.

**Total No of Students Registered:** 28 students

**Course Coordinator:** Ms. Sarmistha Deb.

**Course Co-Coordinator:** Ms. Rajni Khyriem.

## ***Details of Students Enrolled for the Course.***

<b>SL. NO.</b>	<b>FIRST NAME</b>	<b>LAST NAME</b>	<b>EMAIL ID</b>	<b>DEPARTMENT</b>	<b>SEMESTER</b>
1	ANKITA	SEN	ankitasen3002@gmail.com	BCA	THIRD
2	RAJAT	PRASAD	rajatprasad2622@gmail.com	BCA	THIRD
3	IZABERT	NONGDHAR	kkongorizabert@gmail.com	BCA	THIRD
4	ORESTAR JOHN	WANNIANG	johnfisherwanniang80@gmail.com	BCA	THIRD
5	SAGAR	THAKUR	sagarkr.thakur79@gmail.com	BCA	THIRD
6	LAPYNDAPBIANG	KHARUMNUID	alexkharumnuid30@gmail.com	BCA	THIRD
7	MELODY	NARZARY	melodynarzary4@gmail.com	BCA	THIRD
8	ANIMEGH	BORO	animeghb@gmail.com	BCA	THIRD
9	GRAFENBERG	LANGPEN	grafenaveiro@gmail.com	BCA	THIRD
10	ROHAN	YADAV	devishilla09@gmail.com	BCA	THIRD
11	KERRIMEKA	MAWROH	kerrimekamawroh@gmail.com	BCA	THIRD
12	IBALADAPBIANG	ROYWAN	ibaladapbiang00@gmail.com	BCA	THIRD

## ***Details of Students Enrolled for the Course.***

<b>SL. NO.</b>	<b>FIRST NAME</b>	<b>LAST NAME</b>	<b>EMAIL ID</b>	<b>DEPARTMENT</b>	<b>SEMESTER</b>
13	MIRACLE	RANI	miraclerani718@gmail.com	BCA	THIRD
14	JETHRO J ROY	JYRWA	jethrojyrwaroy@gmail.com	BCA	THIRD
15	TANUJA	UPADHAYA	tanujaupadhaya08@gmail.com	BCA	THIRD
16	LANCHENBA	WANGJAM	lanchenbawangjam94@gmail.com	BCA	THIRD
17	JANAK	R.	janakram140303@gmail.com	BCA	THIRD
18	YOU DALIN	MARBANIANG	marbaniangyoudalin@gmail.com	BCA	THIRD
19	SUBHANKAR	DEB ROY	subhankardebroy77@gmail.com	BCA	THIRD
20	BAPHINDAPBIANG	PATHAW	baphinpathaw@gmail.com	BCA	THIRD
21	RONIT KUMAR	SINGH	shanskar2019@gmail.com	BCA	THIRD
22	BANPYNBHALANG	KURBAH	banpynkurbah07@gmail.com	BCA	THIRD

## ***Details of Students Enrolled for the Course.***

<b>SL. NO.</b>	<b>FIRST NAME</b>	<b>LAST NAME</b>	<b>EMAIL ID</b>	<b>DEPARTMENT</b>	<b>SEMESTER</b>
23	AMARJIT	JHA	amarjeetjha04@gmail.com	BCA	THIRD
24	PRAHELIKA	DAS	prahelikadas0312@gmail.com	BCA	THIRD
25	RUSSEL	KHARBHIH	nunyabidnessfammm@gmail.com	BCA	THIRD
26	ADITYA	KUMAR	adityakumarshah608@gmail.com	BCA	THIRD
27	DEIMONMI	KYNDIAH	kyndiahdeimon753@gmail.com	BCA	THIRD
28	ASHISH	RAI	ashishray640@gmail.com	BCA	THIRD

## ***Details of the ONLINE TEST***

<b>SL. NO.</b>	<b>FIRST NAME</b>	<b>LAST NAME</b>	<b>PERCENTAGE</b>
1	ANKITA	SEN	30.0 %
2	RAJAT	PRASAD	10.0 %
3	IZABERT	NONGDHAR	26.0 %
4	ORESTAR JOHN	WANNIANG	<u>40.0%</u>
5	SAGAR	THAKUR	35.0 %
6	LAPYNDAPBIANG	KHARUMNUID	30.0 %
7	MELODY	NARZARY	<u>40.0%</u>
8	ANIMEGH	BORO	<u>70.0%</u>
9	GRAFENBERG	LANGPEN	<u>70.0%</u>
10	ROHAN	YADAV	10.0 %
11	KERRIMEKA	MAWROH	<u>58.0%</u>
12	IBALADAPBIANG	ROYWAN	<u>45.0%</u>

## ***Details of the ONLINE TEST***

<b>SL. NO.</b>	<b>FIRST NAME</b>	<b>LAST NAME</b>	<b>PERCENTAGE</b>
13	MIRACLE	RANI	26.0 %
14	JETHRO J ROY	JYRWA	<u>80.0%</u>
15	TANUJA	UPADHAYA	31.9 %
16	LANCHENBA	WANGJAM	<u>58.0%</u>
17	JANAK	R.	<u>70.0%</u>
18	YOU DALIN	MARBANIANG	<u>50.0%</u>
19	SUBHANKAR	DEB ROY	<u>65.0%</u>
20	BAPHINDAPBIANG	PATHAW	<u>45.0%</u>
21	RONIT KUMAR	SINGH	<u>55.0%</u>
22	BANPYNBHALANG	KURBAH	<u>55.0%</u>

## ***Details of the ONLINE TEST***

<b>SL. NO.</b>	<b>FIRST NAME</b>	<b>LAST NAME</b>	<b>PERCENTAGE</b>
23	AMARJIT	JHA	<u>56.0%</u>
24	PRAHELIKA	DAS	25.0%
25	RUSSEL	KHARBHIH	<u>60.0%</u>
26	ADITYA	KUMAR	<u>61.0%</u>
27	DEIMONMI	KYNDIAH	<u>45.0%</u>
28	ASHISH	RAI	<u>55.0%</u>



## The Spoken Tutorial project

- Self explanatory - uses simple language
- Audio-video - uses multisensory approach
- Small duration - has better retention
- Learner-centered - learn at your own pace
- Learning by doing - learn and practice simultaneously
- Empowerment - learn a new FOSS

## Target group

- Undergraduates / Postgraduates
- Research scholars
- Teachers

## Workshops

The Spoken Tutorial Project Team conducts work-shops on Biopython and other FOSS using spoken tutorials and gives certificates to those who pass an online test

For more details, please write to [contact@spoken-tutorial.org](mailto:contact@spoken-tutorial.org)

The Spoken Tutorial Project is funded by the National Mission on Education through Information and Communication Technology, Ministry of Human Resource Development, Government of India.

## Contact Us

Email : [contact@spoken-tutorial.org](mailto:contact@spoken-tutorial.org)  
[info@spoken-tutorial.org](mailto:info@spoken-tutorial.org)

Website : <http://spoken-tutorial.org>



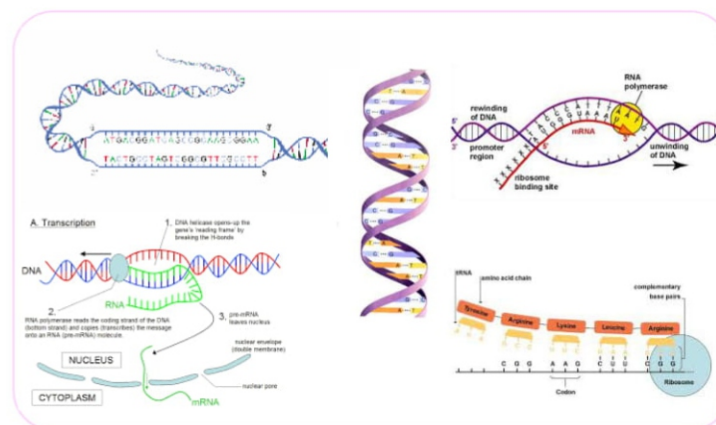
IIT Bombay

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## BIOPYTHON



National Mission on Education through  
Information and Communication Technology  
(NMEICT)

[www.sakshat.ac.in](http://www.sakshat.ac.in)

An MHRD initiative

<http://spoken-tutorial.org>

## Introduction:

- Biopython is a set of freely available Python tools for computational biology and bioinformatics.
- Biopython runs on many platforms (Windows, Mac, Linux and Unix).
- Source code is easily available under Biopython Licence. The Biopython web site <http://www.biopython.org> provides an online resource for modules, scripts and web links.

## Features:

- It has tools for performing common operations on sequences, such as translation, transcription and weight calculations.
- It has ability to parse bioinformatics files into Python utilizable data structure.
- It supports the following formats: Blast output, Clustalw, FASTA, GenBank, PubMed and Medline, ExPASy files, SwissProt etc.
- Files in the supported formats can be iterated over record by record or indexed and accessed via a Dictionary interface

- Code to deal with popular online bioinformatics destinations such as:
  - NCBI – Blast, Entrez and PubMed services
  - ExPASy – SwissProt and Prosite entries, as well as Pros
- Interfaces to common bioinformatics programs such as:
  - Standalone Blast from NCBI
  - Clustalw alignment program
  - EMBOSS command line tools
- Code to perform classification of data using k Nearest Neighbors, Naive Bayes or Support Vector Machines.
- Code for dealing with alignments, including a standard way to create and deal with substitution matrices.
- Code making it easy to split upparallelizable tasks into separate processes.
- GUI based programs to do basic sequence manipulations, translations, BLASTing, etc.
- Extensive documentation and help with using the modules, online wiki documentation, the web site, and the mailing list.

- Integration with BioSQL, a sequence database schema also supported by the BioPerl and BioJava projects

## Uses:

- Parse BLAST results (standalone and web).
- Run biology related programs (blastall, clustalw, EMBOSS).
- Deal with FASTA formatted files.
- Parse GenBank files.
- Parse PubMed, Medline and work with online resource.
- Parse Expasy, SCOP, Rebase, UniGene, SwissProt.
- Data classification (k Nearest Neighbors, Bayes, SVMs)
- Aligning sequences; CORBA interaction with Bioperl and BioJava
- SQL database storage through BioSQL; Neural Networks.
- Neural Networks; Genetic Algorithms
- Structural biology PDB.
- Create specialized substitution matrices.



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IIT Bombay

# Certificate for Completion of Python 3.4.3 Training

This is to certify that **CALWYN SUCHIANG** has successfully completed **Python 3.4.3** test organized at **St. Edmund's College** by **Sarmistha Deb** with course material provided by the Spoken Tutorial Project, IIT Bombay. Passing an online exam, conducted remotely from IIT Bombay, is a pre-requisite for completing this training.

**Rajni Khyriem** at **St. Edmund's College** invigilated this examination. This training is offered by the Spoken Tutorial Project, IIT Bombay.

**Credits: 4    Score: 45.00%**

May 2nd 2023

**Prof. Kannan M Moudgalya**  
IIT Bombay

Credits for the Spoken Tutorial courses are based on our estimates of the work required to complete them. Recipient institutions are required to apply due diligence and get them ratified/modified by their own duly formed academic/assessment body. Spoken Tutorial is a project at IIT Bombay, started with funding from the National Mission on Education through ICT, Ministry of Education (previously MHRD), Govt. of India.





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Project at  
IIT Bombay

# Certificate for Completion of Python 3.4.3 Training

This is to certify that **YANGERMENLA IMCHEN** has successfully completed **Python 3.4.3** test organized at **St. Edmund's College** by **Sarmistha Deb** with course material provided by the Spoken Tutorial Project, IIT Bombay. Passing an online exam, conducted remotely from IIT Bombay, is a pre-requisite for completing this training.

**Rajni Khyriem** at **St. Edmund's College** invigilated this examination. This training is offered by the Spoken Tutorial Project, IIT Bombay.

**Credits: 4    Score: 55.00%**

**May 2nd 2023**

A handwritten signature in black ink, appearing to read 'Kannan Moudgalya'.

**Prof. Kannan M Moudgalya**  
**IIT Bombay**

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Project at  
IIT Bombay

# Certificate for Completion of Python 3.4.3 Training

This is to certify that **AMIT SAHARIA** has successfully completed **Python 3.4.3** test organized at **St. Edmund's College** by **Sarmistha Deb** with course material provided by the Spoken Tutorial Project, IIT Bombay. Passing an online exam, conducted remotely from IIT Bombay, is a pre-requisite for completing this training.

**Rajni Khyriem** at **St. Edmund's College** invigilated this examination. This training is offered by the Spoken Tutorial Project, IIT Bombay.

**Credits: 4    Score: 50.00%**

May 2nd 2023

**Prof. Kannan M Moudgalya**  
IIT Bombay

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# Certificate for Completion of Python 3.4.3 Training

This is to certify that **TESSA BUHRIL** has successfully completed **Python 3.4.3** test organized at **St. Edmund's College** by **Sarmistha Deb** with course material provided by the Spoken Tutorial Project, IIT Bombay. Passing an online exam, conducted remotely from IIT Bombay, is a pre-requisite for completing this training.

**Rajni Khyriem** at **St. Edmund's College** invigilated this examination. This training is offered by the Spoken Tutorial Project, IIT Bombay.

**Credits: 4    Score: 55.00%**

May 2nd 2023

**Prof. Kannan M Moudgalya**  
IIT Bombay

Credits for the Spoken Tutorial courses are based on our estimates of the work required to complete them. Recipient institutions are required to apply due diligence and get them ratified/modified by their own duly formed academic/assessment body. Spoken Tutorial is a project at IIT Bombay, started with funding from the National Mission on Education through ICT, Ministry of Education (previously MHRD), Govt. of India.



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# Certificate for Completion of Python 3.4.3 Training

This is to certify that **MAHESH RAM** has successfully completed **Python 3.4.3** test organized at **St. Edmund's College** by **Sarmistha Deb** with course material provided by the Spoken Tutorial Project, IIT Bombay. Passing an online exam, conducted remotely from IIT Bombay, is a pre-requisite for completing this training.

**Rajni Khyriem** at **St. Edmund's College** invigilated this examination. This training is offered by the Spoken Tutorial Project, IIT Bombay.

**Credits: 4    Score: 45.00%**

May 2nd 2023

**Prof. Kannan M Moudgalya**  
IIT Bombay

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GPS Map Camera

**Shillong, Meghalaya, India**

**HV9W+7R8, Laitumkhrah, Shillong,  
Meghalaya 793003, India**

**Lat 25.568432°**

**Long 91.896632°**

**17/09/22 11:41 AM GMT +05:30**



**Google**





GPS Map Camera



## Shillong, Meghalaya, India

Police POint Road, near ICICI Bank,

Laitumkhrach, Shillong, Meghalaya 793003, India

Lat 25.57052°

Long 91.89723°

18/04/23 12:37 PM GMT +05:30



GPS Map Camera



## Shillong, Meghalaya, India

HVCW+5W6, Don Bosco Rd, Nongkynrih,

Laitumkhrah, Shillong, Meghalaya 793003, India

Lat 25.570417°

Long 91.897306°

18/04/23 12:36 PM GMT +05:30



GPS Map Camera



**Shillong, Meghalaya, India**

HVCV+FRC, Upland Rd, Nongkynrih, Laitumkrah,  
Shillong, Meghalaya 793003, India

Lat 25.571173°

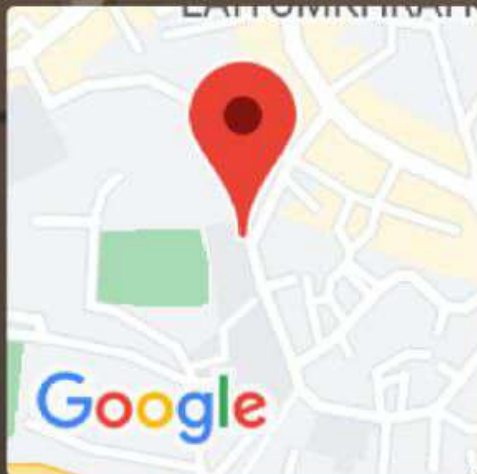
Long 91.89464°

29/06/22 11:50 AM





GPS Map Camera



**Shillong, Meghalaya, India**

HV9W+7R8, Laitumkhrah, Shillong,  
Meghalaya 793003, India

Lat 25.568475°

Long 91.896855°

29/06/22 11:50 AM



GPS Map Camera

**Shillong, Meghalaya, India**

HV9W+7R8, Laitumkhrah, Shillong,  
Meghalaya 793003, India

Lat 25.568361°

Long 91.896722°

17/09/22 11:40 AM GMT +05:30



Google