

FZB • Parkallee 1-40 • D-23845 Borstel

To whom it may concern

Prof. Dr. Inken Wohlers
Biomolecular Data Science in Pneumology

Parkallee 1
D-23845 Borstel

Tel: +49.4537.188 6720
iwohlers@fz-borstel.de
www.fz-borstel.de

Borstel, 19.06.2024

Akash Chandra Baidya has been a research assistant for data visualization in my group Biomolecular Data Science in Pneumology at Research Center Borstel – Leibniz Lung Center from October 1st, 2023 until May 31st, 2024 for 10 hours per week working remotely.

Research Center Borstel is an internationally operating Lung Center within the Leibniz Association, financed by the federal government and the state of Schleswig-Holstein, Germany. My Data Science group performs Bioinformatics research on data generated by novel biomolecular technologies, contributing towards the research center's goal of improving existing methods for the detection, prevention and treatment of lung diseases and of developing new, innovative therapeutic approaches.

Akash has successfully contributed to two collaborative projects, in which he performed comprehensive visualizations of a large number of mass spectrometry results generated by two different external proteomics core facilities. In detail:

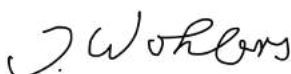
- He became familiar with the provided data files containing the primary results of the proteomics analyses, with the biological background of proteomics data and the experimental setup.
- He generated summary statistics and overview figures on proteins in different conditions, their significant differences and their abundances for various filtering and quality-control settings.
- He generated annotated clustered heatmaps and principal component plots in various settings.
- He re-visited computational and statistical steps conducted by the core facilities to ensure reproducibility of results and for internal documentation
- He exchanged weekly on project progress and contributed to weekly group meetings.
- He presented his results to internal and external project partners.
- He implemented scripts in R and used R with Quarto for comprehensive joint documentation of code and results and for the generation of reports in various formats (especially html and pdf).
- He contributed to establishing the use of FAIRDOMHub in the group to perform project, script and result documentation. He archived the results of his work in two FAIRDOMHub projects (<https://fairdomhub.org/projects/424> and <https://fairdomhub.org/projects/425>).

Akash was in the unique position to independently establish and provide Data Science approaches for proteomics, a data type that had not yet been addressed by my group. He established basic proteomics expertise very successfully and conducted his work to full satisfaction. Within regular weekly meetings, we discussed tasks and specific analyses and figures, which he always implemented independently, in a timely manner and according to discussed specifications. I enjoyed working with Akash because of his technical skills, reliability, professionalism and kindness.

We regret that Akash is moving on to a job with more than 10 working hours and thank him for the excellent work. We wish him all the best and continued success in future professional and personal endeavors.

Please feel free to contact me if you require any further information or have any questions.

Sincerely,



Inken Wohlers
Professor in Data Science in Pneumology

Dortmund, September 18, 2023

To whom it may concern,

Akash Chandra Baidya worked as a graduate assistant in the Research Training Group (RTG) 2624 “Biostatistical Methods for High-Dimensional Data in Toxicology”. He was mainly supervised by Dr. Franziska Kappenberg, who is working as a postdoc in the RTG, affiliated with my chair “Statistical Methods in Genetics and Chemometrics”.

As part of his work, he first has familiarized himself very successfully with the theory and analysis of identifying differentially expressed genes in RNAseq gene expression experiments. Then he applied this knowledge to implement an R program that can be used for simulating realistic datasets with desired properties. This program will be helpful for the future comparison of statistical methods for analyzing gene expression data in controlled scenarios. The progress of his work was discussed regularly once per week, and he was always well prepared and open for suggestion from the supervisors.

Akash Chandra Baidya was working on this project, as typical, for one semester, starting in April 2023, and finishing in September 2023. Personally, I know Akash Chandra Baidya as a friendly and motivated student, and he has performed the tasks to our full satisfaction. I wish him all the best for his future career.

Sincerely,



Prof. Dr. Jörg Rahnenführer

Technische Universität Dortmund | D-44221 Dortmund

Diktatzeichen	Aktenzeichen	Ort	Datum	Dienstgebäude/Raum
	-	Dortmund	06.05.2024	

Reference letter for Mr. Akash Chandra Baidya

To whom it may concern,

it is my sincere pleasure to recommend Akash Chandra Baidya for job or academic pursuit. I had the privilege of instructing Akash in my Advanced Statistical Learning course at Technische Universität Dortmund, and I was consistently impressed by his dedication, analytical aptitude, and insightful contributions to class discussions.

In addition to excelling in the coursework, Akash served as a highly competent Wissenschaftliche Hilfskraft (WHF) for the Advanced Statistical Learning course from April 2022 to September 2022. He demonstrated exceptional ability in explaining complex statistical concepts and providing R programming guidance, grading assignments.

Akash possesses a strong foundation in statistical methods and a genuine interest in their application. He is a clear communicator, a collaborative team member, and demonstrates a willingness to take on new challenges. I am confident that Akash would make significant contributions to your program/organization.

I appreciate your time and consideration in reviewing this recommendation. Please reach out to me, if any further information is required. Sincerely,



Prof. Dr. Andreas Groll
Statistical Methods for Big Data
Head of the M.Sc. Data Science examination board

Technische Universität Dortmund | D-44221 Dortmund

Lehrstuhl für Data Science
and Data Engineering

Prof. Dr. Emmanuel
Müller
Informatik Lehrstuhl 9
Otto-Hahn-Str. 14
44227 Dortmund

Tel. 0231 755 7722
emmanuel.mueller@tu-
dortmund.de

www.tu-dortmund.de

D o r t m u n d ,
06.05.2024

Recommendation Letter

Mr. Akash Chandra Baidya, was a master's student of Data science program from the Technical University of Dortmund who successfully completed case study "Time Series Processing, Anomaly Detection and Explanation" under my supervision at the chair for Data Science and Data Engineering.

During his tenure as a student assistant in our group, he consistently demonstrated outstanding capabilities in various aspects of data analysis and machine learning. He primarily undertook responsibilities such as managing help-desks and evaluating exercises including python notebooks.

During his participation in the case study at our chair, he adeptly utilized advanced techniques, including Long Short-Term Memory (LSTM) networks, and meticulously analyzed and compared the performance of these models for anomaly detection using extensive datasets collected from over ten facilities at TU Dortmund. Moreover, Mr. Akash Chandra Baidya has furthered his expertise by completing additional coursework in "Big Data Analytics" and "Machine Learning for Complex Data" at our chair. He has also completed a seminar course on "Unsupervised Machine Learning - Anomaly Detection", where he authored a comprehensive report, showcasing his commitment to continuous learning and professional development.

To conclude, we would like to restate our recommendation for Mr. Akash Chandra Baidya, who exhibits an appreciation for theory and scientific methods, creativity, and a lust for learning.


Prof. Dr. Emmanuel Müller

If you have any more questions, please write to
office@ls9.cs.uni-dortmund.de

To whom it may concern

Diktatzeichen

Aktenzeichen

Ort

Datum

Dienstgebäude/Raum

12.06.2024

Letter of Experience for Akash Chandra Baidya

To whom it may concern

I am writing to confirm that Akash Chandra Baidya has worked as a Teaching Assistant for the course “Probabilistic Reasoning for Machine Learning” at Technical University of Dortmund. Akash Chandra Baidya served in this role from October 1, 2022, to March 31, 2023, and again from October 1, 2023, to March 31, 2024.

Throughout these periods, Akash Chandra Baidya was responsible for various duties essential to the successful delivery of the course. These responsibilities included assisting with grading assignments.

Akash Chandra Baidya’s performance as a Teaching Assistant was satisfactory. He demonstrated a reasonable understanding of the course content.

We appreciate Akash Chandra Baidya’s contributions to the course and wish him the best in his future endeavors.

Sincerely,



To Whom It May Concern

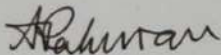
Akash Chandra Baidya was working as an IT Officer In Charge at Singer Bangladesh Ltd. from November 1st, 2018 to March 31st, 2021. His responsibilities were 'Plan and develop in-house software', 'Maintain in-house developed softwares', 'Plan and develop mobile applications', 'Maintain and develop Jasper reports for monthly and requirement basis' and 'Documentation of softwares and reports'.

Akash worked in several in-house software projects. He possesses expertise in django (a python based development framework) and developed 'Lease Management System', 'Online Service Request Form', 'API for Online Installment Management System' and 'API for location based one time password generator'. He also has shown skills in android and developed and completed 'Location based one time password generator'. He worked in PHP based in house application development. He also worked in development and maintenance of Jasper reports.

Akash performed well for the requirements of the job. He is committed to his tasks, motivated, a self starter and a quick learner. He is very inquisitive in understanding of requirements. I am satisfied with his enthusiasm and challenging attitude. His ability to work in a team was good. He completed all his tasks in a professional manner. Even after his departure, he is highly remembered by the users and team members here. I am honoured to write this letter of recommendation for Akash Chandra Baidya who I have had the honor of knowing for the last two years and five months.

He is a bright and outgoing young individual who enjoys working in software development. He is reliable and a great team member and possesses the competency and experience needed for working in software development.

Sincerely,



Md. Anisur Rahman

Head Of Information Technology

Singer Bangladesh Limited

House 5B, Road 126, Gulshan-1, Dhaka -1212

Email: anis@singerbd.com

Contact No: +880-1819222242



May 14, 2019

To shim it ma concern

I am very ecstatic to convey my opinion about Mr. Akash Chandra Baidya for graduate program. He has concluded his B.Sc. Degree in 'Computer Science and Engineering' from 'Khulna University of Science and Technology'. I came to know about him since february 2017. I was his supervisor of several projects since he joined Ubitrix Inc as Software Engineer. From the very first day, I found him very sincere. He worked with me on 'Ag-palliative care'(Android & Web), 'Natural Family Planning'(Android, Web), 'Speech Therapy Online'(Web), 'MCW Preemie' (Web), 'Suicide Prevention'(Web) and 'ITextMessaging'(Web). He finished these projects in due time and was adept in delivering products with delicate details. The response from user end was astounding and overwhelming.

As far as I am concerned, Akash is very hardworking and smart. During his time at Ubitrix Inc., he worked intensely in office hours and if needed, he worked after the office hours, to meet the deadline. He is very strict on completing his task in time. I found him very regular and was on time with office entrance and also he was never late on any meeting with our valued clients. He is substantial in communication and I always found him in any emergency situation and he is very prompt to respond to my email and hangout messages. The majority of the projects that I worked with Akash was research related works so, it required huge study, awareness, perceiveness, innovation, perseverance and patience. He understood the requirements promptly and gave all his efforts to implement any research product. He holds amazing talent to convince clients with his presentation skills.

Akash is very much interested in newer technology and he is always keen to learning new things. He excels in 'Android', 'PHP' and 'Django' as development platform as well as keeps great interest in big data and machine learning. I know that he took several online courses to deepen his understandings on those topics. He is also good with organizational activities. He inspired the development team to start a weekly presentation to share recent development updates in every field. He was also inspirational in creating several seminars which involves developers from other companies. He was involved in different sports program. He also took part in table tennis, football and cricket representing Ubitrix Inc. In my view, Mr. Akash holds great leadership skills, innovative technical skills, communication skills and always motivated to take up new challenges. I greatly recommend Mr. Akash for any research or development related task.

I would also like to recommend him extremely for financial assistance/ fellowship/ research assistant/ teacher assistant/ django developer. I wish him extraordinary success along his journey for the future.

Sincerely,

Sheikh Iqbal Ahamed, Ph.D.

Professor of Computer Science and Director, UbiComp Lab

Marquette University, Milwaukee, WI 53201-1881

Email: sheikh.ahamed@mu.edu

Phone: 414-288-5222 (W)

Date: July 1st, 2018

TO WHOM IT MAY CONCERN

This is to certify that **Akash Chandra Baidya**, Son of **Amulya Chandra Baidya** worked as Software Engineer in Mobile Application Development Team at UBITRIX Inc from **February 2017** to **June 2018** with our entire satisfaction. During his working period we found him a sincere, honest, dedicated employee with a professional attitude and very good job knowledge. He is amiable in nature and character is well. We have no objection to allow him in any better position and have no liabilities in our company.

We wish him every success in life.

Regards,



Managing Director
Ubitrix Bd Ltd.

zhb - Bereich Fremdsprachen

Leistungsnachweis

Herrn/Frau Akash Chandra Baidya

wird hiermit bescheinigt, dass er/sie im Rahmen der Kategorie
Deutsch als Fremdsprache im Sommersemester 2021 den Kurs

Deutsch A1 Data Science
bei Frau Miri Shalini Stoll

belegt hat.

Matrikelnummer: 230378
Abschlussnote: gut (1.7)
Semesterwochenstunden: 6 (sechs)
ECTS-Punkte: 0 (null)

Dortmund, im Juli 2021

i.A. gez. Dr. Meni Syrou
(Leiterin des Bereichs Fremdsprachen)

ECTS-Leistungsnachweis

Seite 1 von 4

Name des Studierenden:	Akash Chandra Baidya
Geburtsdatum und -ort:	29.12.1993 in Bangladesh
(angestrebter) Abschluss:	Master an Universitäten
Matrikelnummer:	230378
Heimathochschule:	Technische Universität Dortmund

Studiengang: Data Science

Titel	Prüfer	Note(1)	ECTS- Leistungs- punkte(2)
60000 Pflicht / Wahlpflicht Module			36,0
60100 Modul Advanced Statistical Learning		2,0	9,0
60191 Modulprüfung Advanced Statistical Learning	Grol01	2,0	9,0
60300 Modul Data Science in Practice		1,8	6,0
60351 Teilleistung Programming course	Paul05	2,0	3,0
60352 Teilleistung Data Science in Context	Grol01	1,7	3,0
60400 Modul Project work		2,1	12,0
60451 Unsupervised Machine Learning - Anomaly Detection	Müll34	2,3	4,0
60452 Time series processing, anomaly detection, and explanation with focus on energy consumption data	Müll34	2,0	8,0
60500 Modul Big Data		3,0	9,0
60591 Modulprüfung Big Data Analytics	Müll34	3,0	9,0
63025 Wahlpflicht Methods			28,0
63900 Modul Real-Time Systems		3,3	8,0

Dortmund, den 10. Mai 2023

ECTS/ European Credit Transfer System

ECTS-Leistungsnachweis

Seite 2 von 4

Studiengang: Data Science

Titel		Prüfer	Note(1)	ECTS- Leistungs- punkte(2)
63991	Modulprüfung Real-Time Systems	Chen01	3,3	8,0
66300	Modul Generalized Linear Models			0,0
76400	Modul Machine Learning Paradigms for Complex Data		4,0	8,0
76491	Modulprüfung Machine Learning Paradigms for Complex Data	Schu63	4,0	8,0
76600	Modul Introduction to Artificial Intelligence		3,7	3,0
76691	Modulprüfung Introduction to Artificial Intelligence	Glas03	3,7	3,0
91100	Modul Deep Learning		1,3	9,0
91191	Modulprüfung Deep Learning	Rüga01	1,3	9,0
67005	Wahlpflicht Applications			20,0
67200	Modul Statistics in Genetics (Bioinformatics)		2,7	9,0
67291	Modulprüfung Statistics in Genetics (Bioinformatics)	Rahn01	2,7	9,0
77500	Modul Industrial Data Science I		3,0	5,0
77591	Modulprüfung Industrial Data Science I	Paul05	3,0	5,0
79900	Modul Platzhalter Applications		1,0	6,0
79991	Information Mining		1,0	6,0
71005	Possible requirements in case of conditional admission		0,0	20,0
71400	Modul Probability		0,0	5,0
71491	Modulprüfung Reading Course Probability	Jent01		5,0
71500	Modul Inference		0,0	5,0

Dortmund, den 10. Mai 2023

ECTS/ European Credit Transfer System

ECTS-Leistungsnachweis

Seite 3 von 4

Studiengang: Data Science

Titel		Prüfer	Note(1)	ECTS- Leistungs- punkte(2)
71591	Modulprüfung Reading Course Inference	Icks01	0,0	5,0
71600	Modul Linear Models		0,0	5,0
71691	Modulprüfung Reading Course Linear Models	Icks01	0,0	5,0
71700	Modul Introductory Case Studies		0,0	5,0
71791	Modulprüfung Introductory Case Studies (parts of the course "Fallstudien I" of the module BD 14 of the Bachelor programme Data Science)	Wech02	0,0	5,0
59997	Durchschnittsnote alle Module		2,4	84,0

(1) (2) Erläuterung siehe nächste Seite

Dortmund, den 10. Mai 2023

ECTS/ European Credit Transfer System

ECTS-Datenabschrift

Seite 4 von 4

Erläuterungen

(1) Beschreibung des Notensystems, das an der Hochschule angewendet wird

1,0/ 1,3/ 1,5	sehr gut
1,7/ 2,0/ 2,3/ 2,5	gut
2,7/ 3,0/ 3,3/ 3,5	befriedigend
3,7/ 4,0	genügend
5	ungenügend

(2) Kursdauer und Credits

Ein volles akademisches Jahr	60 ECTS-Leistungspunkte
Ein Semester	30 ECTS-Leistungspunkte
Ein Trimester	20 ECTS-Leistungspunkte

Khulna University of Engineering & Technology Bangladesh



*On the Recommendation of the Academic Council
The Syndicate has Conferred Upon*

Akash Chandra Baidya

The Degree of
Bachelor of Science in Computer Science & Engineering

With all of its Privileges and Obligations Given on the May 21, 2017.

His/her Grade Point Average is 3.11 in a Scale of 4.00.

Controller of Examinations
Date: April 04, 2018



Registrar

Vice-Chancellor

BOARD OF INTERMEDIATE AND SECONDARY EDUCATION, DHAKA
BANGLADESH

Serial No. DBH 1262692

DBCHC 11143018



Registration No. 580709/2009

HIGHER SECONDARY CERTIFICATE EXAMINATION, 2011

This is to Certify that Akash Chandra Baidya

Son / Daughter of Amulya Chandra Baidya


and Manju Rani Barai

of Notre Dame College

bearing Roll Dhaka *No.* 10 75 72 *duly passed the*
Higher Secondary Certificate (HSC) Examination in Science *group and secured*
G.P.A 5.00 *on a scale of 5.00.*

Dhaka

Date of Publication of Results : **27 July, 2011.**


Controller of Examinations

Note: This Certificate is issued without any alteration or erasure.

BOARD OF INTERMEDIATE AND SECONDARY EDUCATION, DHAKA.

BANGLADESH

Higher Secondary Certificate Examination, 2011

Serial No. DBH 1240270

DBCH 11143018



ACADEMIC TRANSCRIPT

Letter Grade	Class Interval	Grade Point
A+	80-100	5
A	70-79	4
A-	60-69	3.5
B	50-59	3
C	40-49	2
D	33-39	1
F	00-32	0

Name of Student : Akash Chandra Baidya

Father's Name : Amulya Chandra Baidya

Mother's Name : Manju Rani Barai

Name of Institution : Notre Dame College (1076)

Name of Centre : Dhaka - 52, Ideal School & College, Motijheel (474)

Roll No. : 10 75 72

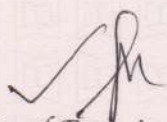
Registration No. : 580709 / 2009

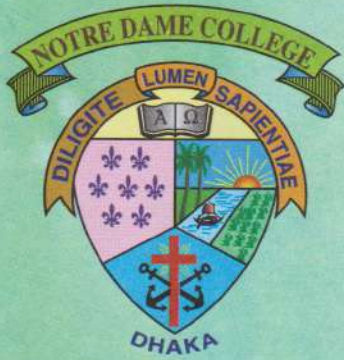
Group : Science

Type of Student : Regular

SL. No.	Name of Subjects	Letter Grade	Grade Point	GPA (without additional subject)	GPA
1	Bangla	A	4	4.80	5.00
2	English	A+	5		
3	Mathematics	A+	5		
4	Physics	A+	5		
5	Chemistry	A+	5		
Additional Subject :					
6	Biology	A+	5	GP above 2	3.0

Date of Publication of Results : 27 July 2011


Controller of Examinations



NOTRE DAME COLLEGE

G.P.O. Box No. 5
Motijheel, Dhaka-1000
BANGLADESH

Phone : 7192325, 7192598
E-mail : ndcbcosta@gmail.com
Website : www.notredame.ac.bd

College Roll No. 1114061

Testimonial

This is to certify that Akash Chandra Baidya
son of Amulya Chandra Baidya and Manju Rani Barai
from Tangail District, Bangladesh, was a student of
Notre Dame College in the Intermediate Science class from
July 2009 to June 2011

He appeared for the Higher Secondary Certificate Examinations of
the Dhaka Board of Intermediate and Secondary Education in the
year 2011 as a candidate from this college bearing
Board Roll No. 107572 Registration No. 580709
Session 2009-10 and passed with GPA 5.00 on a scale of 5.00.

His combination of subjects was :

Bangla, English, Physics, Chemistry, Mathematics & Biology (Opt.)

I also certify that to the best of my knowledge he has a good moral
character. While at this college he was not a source of indiscipline.

Date : August 21, 2011



R. Costa, M.A.
Principal