



Technische Universität Dresden, 01062 Dresden

To Whom it May concern

Prof. Dr.  
**Rudolf Liedl**  
Leiter des Instituts

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AZ:

Dresden, September 10, 2020

*Experience letter for Ms Vedaanti Baliga, MSc*

Dear Madam, Dear Sir,

This letter certifies that Ms Vedaanti Baliga was the Technical Lead / Senior Project Assistant (Technical) from August 2019 - May 2020 for a project in collaboration with the Indian Institute of Technology Delhi, Technische Universität Dresden (TUD), Germany and University of Texas, Austin, USA. She also previously interned with us during her last semester of her college, i.e. from January 2019 to July 2019.

During this time, Ms Baliga developed a web platform called CAST (Contamination Assessment and Site-Management Tool) using the Flask framework. She was responsible for the end-to-end / full stack development of the website, for which she used HTML, JavaScript, CSS, Bootstrap for the frontend and MySQL, Python for the backend. Her work also comprised of making insightful data visualisations (scipy, plotly, sklearn) and interactive data analytic tools. She then deployed the same on the IITD server (Baadal) which is now live at: [www.cast.iitd.ac.in](http://www.cast.iitd.ac.in)

Ms Baliga also maintains and manages the GitHub repository for this software at: <https://github.com/CAST-IIT>. She has been providing support for finalizing, extending (new model interfaces) and server work at TUD. Apart from this, she has been one of the authors of an abstract accepted by GQ2019. She is also an author of an upcoming paper on CAST that will soon be submitted to FH-DGGV (Hydrogeology Section in the German Geological Society / Geological Union) for publishing.

Yours sincerely,

Prof. Dr. Rudolf Liedl  
Head of the Institute



**TECHNISCHE  
UNIVERSITÄT  
DRESDEN**

Fakultät Umweltwissenschaften  
Fachrichtung Hydrowissenschaften  
Institut für Grundwasserwirtschaft  
01062 Dresden



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*B.R. Chahar*, Ph.D

Professor

Department of Civil Engineering

Date : August 04, 2020

## LETTER OF RECOMMENDATION

### To whom it may concern

I am very pleased to recommend Ms. Vedaanti Baliga who has completed her 6-month final year undergraduate (B. Tech.) project as an intern under my supervision at the Indian Institute of Technology Delhi (IITD). I have learned that Ms. Baliga's project work was highly appreciated by her professors who evaluated her during her University exam. This also corresponds to my grading for her work and confirms my opinion regarding her capabilities. She further worked as '**Project Assistant (Tech)**' in contractual capacity from August 2019 to May 2020.

For a development of a web-based "contaminated site assessment tool" along with my colleagues at TU Dresden (Germany), I was in a look for a CS-IT student. Ms. Baliga was recommended to me through a colleague from her University. Besides maintaining over 90% CGPA in her course works, I found that Ms. Baliga had experience with the software development of a Water Resources (Irrigation) Project and she had sufficient depth in independent computer programming with different languages. Our project required schemes for data-base management, computing and analysis, visualization and code-optimization for web-based implementation. Furthermore, our project was to use open-source technologies only. She started from a scratch and thus it was a big challenge for Ms. Baliga.

As we chose Python-language based development, Ms. Baliga essentially helped us decide on a web-development framework (Flask) and then used several Python-libraries (Pandas, Numpy, Scipy, Matplotlib, Plotly etc) and MySQL for the backend development and HTML/CSS/JavaScript for the front-end development. I am very glad to inform you that Ms. Baliga has also deployed this project on the IITD server, which is now available and can be accessed at [www.cast.iitd.ac.in](http://www.cast.iitd.ac.in). The source code (creative common licensed) is now available at GitHub (<https://github.com/CAST-IIT/CAST>).

It surely was a challenge for Ms. Baliga to independently and alone (as we all are not from CS-IT background) bring this project to a logical conclusion that we intended. During the process Ms. Baliga developed skills to communicate with non-CS/IT workers, seek help and collaboration from her teachers, my colleagues (from CS/IT background) and several groups of students. I clearly find that she has learned far many inter-personal communication tricks.


Ms. Baliga was regularly required to present her works. This was required for us to share the progress of the work with our international partners, but for Ms. Baliga to realize the importance of deadlines and more importantly improve her presentation skills. I may safely say that Ms. Baliga is now very matured with these skills. My colleagues Prof. R. Liedl (TU Dresden) and Prof. C. Werth (Un- Texas, Austin) shares my opinion. Perhaps these skills/exercises were helpful for the oral defence of her project. I have learned that she was one of the best presenters among her classmates.

We are finalizing the research paper of this project where Ms. Baliga is the third author and continues supporting us with these works. Also, she is voluntarily supporting my team with the few additional software developments works that we consider is essential for the usability of the developed tool.

During our project Ms. Baliga was challenged in many aspects: an independent workload, international (academic) collaboration and time difference (India-Germany-Texas), language and presentation skills and inter-cultural sensitivities. She surely made it. Her English language skills, definitely much above the average for non-native speakers, was mostly not an issue for us. She has clearly improved on all other fronts. I think she is ready for bigger challenges.

In particular Ms. Baliga has been interested in Data-Science field within CS/IT. Our project only offered a small challenge with Data-Science but it did help her understand how to manage data and usefully visualize them. I think she can extend to what she learned from us.

I am very sure that Ms. Baliga will be a successful computer engineer or scientist. I am absolutely in no hesitation to recommend her. Please feel free to contact me for further information.



**Dr. B. R. Chahar**  
Professor  
Department of Civil Engineering  
Indian Institute of Technology Delhi  
Hauz Khas, New Delhi-110016, India





Technische Universität Dresden, 01062 Dresden

Prof. Dr.

**Rudolf Liedl**

Leiter des Instituts

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AZ:

Dresden, February 4, 2020

*Reference for Ms Vedaanti Baliga, BSc*

Dear Madam,  
Dear Sir,

It is my pleasure to unhesitatingly recommend Ms Vedaanti Baliga, BSc, a student who holds great promise, for admission to your institution. Ms Baliga has been working on a common project in the area of environmental pollution management. I have known her through the work that she has done on the project and through presentations over Skype. This has given me ample opportunities to evaluate her capabilities closely, both academically and personally. Ms Baliga displays a strong work ethic evidenced by her conscientiousness and ability to meet various project milestones.

Being from a different scientific background, I would not be aware of intricacies of programming, however, I have relied on Ms Baliga's computer programming skills which she has brought to bear on the project through her dedication and strong sense of curiosity. At the core of the project is a set of groundwater contamination assessment tools which comprise models, visualizations and interactions. As the only computer science student working on the project, Ms Baliga successfully managed to handle various stages from coding to communication. The essential requirements of the project were to have good knowledge of the Python programming language, JavaScript and other full stack developer requirements.

Ms Baliga developed all these skills along the way and updated us with the web platform whenever she was asked to. The project is now almost ready to go live on our university server at TU Dresden, Germany, which is a major achievement for Ms Baliga. She has successfully learnt the most important aspect of the project, that is data visualization and analysis. She is now able to visualize kernel density curves, histograms, regressions fits, database management, code efficiency in Python and, lastly, present all her work through an easily accessible interface for all users.

We also interacted through multiple Skype presentations where Ms Baliga showcased the work that she had been doing. She came prepared with a PowerPoint presentation and a demo of the current state of the site. She is very respectful and always shows professionalism during her presentations. Her communication skills are laudable, and she is fluent and concise in delivering her points.

Developing such a project takes a lot of patience and hard work and I am sure that Ms Baliga will be able to adapt and deliver very well in future projects.

Yours sincerely,

A handwritten signature in black ink, appearing to read 'Rudolf Liedl', with a stylized flourish at the end.

Prof. Dr. Rudolf Liedl  
Head of the Institute



# Quant Binary

Quantitative Investment Management

## Letter of Recommendation

1/10/2021

To whomsoever it may concern,

Please consider this letter to be my recommendation for Vedaanti Baliga. She joined us as a Machine Learning Intern at Quant Binary, an AI based quantitative investment financial services firm. Based on her promising leadership and communication skills she was promoted to Machine Learning Engineer shortly after.

Vedaanti led a team of interns and regularly facilitated deliveries and tasks assigned. Being new to the stock market, she took the initiative to carefully research, document and develop the concepts associated with the field. Her impressive grasp, passion for algorithms and problem solving abilities could be seen from the work that she did.

During her time at this company, she tested and deployed two algorithmic trading strategies on a cloud-based hosting platform(minimum viable products), delivered full reports, documentation as well as backtesting codes for these strategies. Her efforts helped us achieve a single day +9% profit in our paper trading account. She also did content generation(financial/stock trading insights) for our social media.

If you have any further questions or wish to further discuss her qualifications, please do not hesitate to contact me. I would be happy to discuss Vedaanti's suitability for your company.

Sincerely,

DocuSigned by:

*Anwar Adil*

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**Anwar Adil**

Founder,

Quant Binary, San Francisco Bay Area, USA



11th September 2020

To Whom It May Concern,

Please consider this letter to be my recommendation for Vedaanti Baliga. During the time Vedaanti worked for me at Pikkal & Co, she worked as a Machine Learning Engineer, and contributed to the team significantly in our tasks and projects.

Vedaanti has a strong desire for continual learning, and for accepting new and challenging projects. She is also very proactive in dealing with problems and is effective in anticipating potential issues before they surface.

If you have any further questions, please do not hesitate to contact me. I will be more than happy to discuss Vedaanti's suitability to your company.

Sincerely,

DocuSigned by:  
  
63AB867EC5EE4F6...

Graham Brown  
Founder & CEO  
Asia Tech Podcast Pte. Ltd.



Vedaanti B &lt;vedaantibaliga@gmail.com&gt;

## Letter of Referral

1 message

**Sunil Singh** <sunil.ks1@samsung.com>

Wed, Jul 25, 2018 at 2:51 PM

Reply-To: sunil.ks1@samsung.com

To: "vedaantibaliga@gmail.com" &lt;vedaantibaliga@gmail.com&gt;

Hi,

Vedaanti had interned with us for one month during which she worked on .NET and created windows forms and web applications. She was punctual and regular for work. She picked up fast, worked diligently and exceeded my expectations for an intern. She conversed in a polite and respectful manner with her colleagues, her quality of work was very good.

Regards,

**Sunil Singh**

Samsung SDS India

Mob # 91-9910529005

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Website : www.sds.samsung.com

**July 25, 2018**

**To Whom It May Concern**

This is to certify that **Ms. Vedaanti Baliga** from **Manipal University, Jaipur** was involved in the following practical internship as a student trainee from **June 26, 2018** till **July 25, 2018** at our organization.

**Department:** IT Solutions Group

**Projects Done:**

- WINDOWS FORMS
- WEB APPLICATIONS USING.NET

During the tenure we found her Sincere and Hardworking.

We wish her great success in the future endeavors.

for **SAMSUNG SDS INDIA PVT. LTD.**

**Nishant Kumar Sharma**  
**Head HR**



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: br.chahar@gmail.com

Web-page : <http://web.iitd.ac.in/~chahar>

Date : June 26, 2019

CERTIFICATE

This is to certify that the project entitled “*Web Based Platform for Predictive Assessment of Groundwater Contamination*” was carried out by **Vedaanti Baliga (159102158)** at the Indian Institute of Technology Delhi, New Delhi under my guidance during January, 2019 to July 2019.

I wish her all the best.

(B. R. Chahar)

**Dr. B. R. Chahar**  
Professor  
Department of Civil Engineering  
Indian Institute of Technology Delhi  
Hauz Khas, New Delhi-110016, India