

## MESSAGE FROM THE PRESIDENT



Dear Friends,

Greetings!!

You shall be happy to know that IAStructE is very actively engaged in conducting technical lectures, webinars, publication of newsletters, CROSFALL & Structural Engineering Digest. All these activities have very rich technical contents & are being appreciated by the fraternity.

Structural Engineering Digest (SED) Jan-Mar 2023 issue dedicated to the theme of "Structural Engineering for Sustainable Development" has been finalized and will be released shortly. I hope you will find it useful. Third issue of CROSFALL was also released this month. You may contribute any structural failure for publication in future issues. As you know identity of the reporter and the project is not disclosed. It is purely for learning purposes. Two more guidelines "Guidelines for design of Bridge abutments & Retaining walls" and "Guidelines for selection & Design of post installed anchors for concrete connections" have also been published. I hope they will be quite useful to Civil & Structural Engineers.

As mentioned earlier a new program of accreditation of engineers as 'Accredited Structural Engineer IAStructE' has been launched on first January 2023. It is expected to raise the standards of structural engineering practice in the country. A webinar to explain the process was organized on 19<sup>th</sup> April which was very well attended. I urge you to spread the word about it and encourage engineers to apply. The Results of IAStructE awards 2022 have been announced and the list of winners is published in this newsletter. My congratulations & good wishes to all the winners.

IAStructE has completed the process of elections for the new Governing Council for the term 2023-25. New Governing Council shall take over during next AGM scheduled to be held on May 8, 2023.

I encourage you to send your feedback on our activities and suggestions for further improvements.

Best regards,



Manoj Kumar Mittal  
President-IAStructE

## FROM THE EDITOR'S DESK



Dear Readers,

We hope this newsletter finds you healthy and safe. As we move forward into the month of May, we want to take a moment to reflect on the events of the organization conducted during the past month and acknowledge the strength and resilience of our community. The highlights of this

month's issue include the declaration of National awards along with regular dissemination of knowledge.

Thank you for being a part of our community, and we look forward to continuing to serve you in the months ahead.

Thanks & Regards,



Dr. Visalakshi Talakokula

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## **IAStructE National Awards 2022 Results:**

The following entries have been declared winners for the National Award IAStructE 2022 in the various categories as given below:

### **1. Outstanding Structure Awards**

- ★ **Buildings including, residential & commercial buildings, hospitals, schools etc. –**
- ★ Larsen & Turbo Limited (Chennai) for Prestige Jindal City Project, Bangalore
- ★ **Other than Buildings such as, Bridges; Large span space structures for sports, exhibitions; industrial structures, monuments –**
- ★ Ashoka Buildcon Ltd. (Nashik) for Narmada Bridge, Gujarat

### **2. Outstanding Structural Engineer Award**

- ★ **Dr. B. Arun Sundaram**, Principal Scientist, Structural Health Monitoring Laboratory, CSIR – Structural Engineering Research Centre

### **3. Outstanding Woman Structural Engineer Award**

- ★ **Dr. Padmaja Gokaraju**, Asst. Vice President, Designs & Product Development, Kirby Building Systems and Structures India Pvt. Ltd, Hyderabad

### **4. Promising Young Structural Engineer Award**

- ★ **Dr. Shivang Shekhar**, Assistant Professor, School of Civil & Environmental Engineering, IIT Mandi (HP)
- ★ **Dr. A. Vanuvamalai**, Project Manager Design, M/s Sonne Infrastructures Pvt. Ltd., Chennai

### **5. Best M. Tech Thesis Award 2020**

- ★ **Mr. Aditya Parpe**, PG student, IIT Bhubaneswar

## **Online Webinars:**

### **Online webinar on “Digitalization in Construction Industry”**

An online webinar on "Digitalization in Construction Industry" by Ms. Anamika Kadam, DGM-Civil, L&T Construction Pvt. Ltd. was organized on 27 April 2023. It was moderated by Prof. Visalakshi Talakokula, Honorary Secretary, IAStructE. The importance and advantages of digitization in the contemporary construction industry were well explained by the speaker.

YouTube link: <https://www.youtube.com/live/JryEA7XGLpg>



*Fig. 1 Glimpses from the webinar*

## 2<sup>nd</sup> Session for ASE-IAStructE Program:

The second session of the IAStructE Webinar on the Accredited Structural Engineer Program was held on April 19, 2023. Prof. Prem Krishna, Professor (Retd.), IIT, Roorkee and GC Member IAStructE, facilitated the discussion. The attendees expressed their deep appreciation for the panelists' discussions. Following were the panelist:

- Mr. Manoj Mittal, President, IAStructE
- Mr. Alok Bhowmick, FNAE, Int. PE (India), Imm. Past President, IAStructE
- Mr. Umesh Rajeshirke, Vice President (West), IAStructE

YouTube link to watch the webinar: <https://www.youtube.com/live/8yaQ2Z405-k>

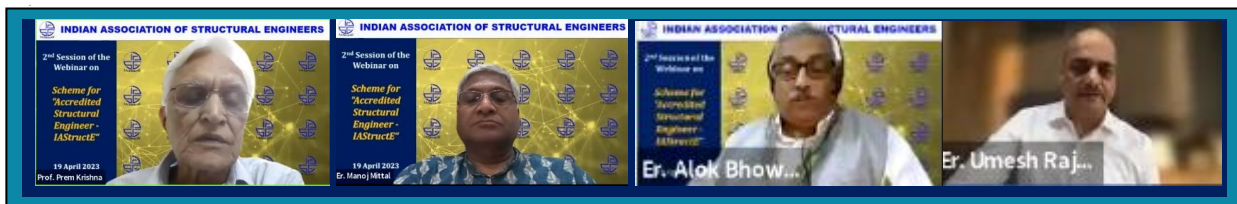


Fig. 2 Glimpses from the 2<sup>nd</sup> session

## IAStructE Student Chapters Activities:

### 1. IAStructE – CEPT, Ahmedabad Student's Chapter

★ **Title of the Event:** Technical Visit to the Precast Manufacturing Plant of PSP Projects Ltd., near village Mankol, Ahmedabad

**Date:** 13 April 2023

**Proceedings of the event:** A technical visit by the Faculty of Technology and IAStructE CEPT student chapter, CEPT University was organized on 13 April 2023. The objective of the visit was to learn the manufacturing process of the precast concrete components as well as to understand the benefits of using precast concrete in constructions. The HR manager gave a briefing regarding safety, distributed masks and safety helmets to all students. The visit started with a full 360 degree view from walkway – gallery located at the top of the plant. The entire plant was fully automatic and equipped with heavy machineries with minimum amount of labor. The plant had its own material stacking area and batching plant to prepare concrete mix from grade M10 to M70. Separate space was assigned to cast the units – slabs, beams, columns, etc. Steam curing and admixtures were used to attain early strength. The reinforcement bar cutting process and stirrups making, was entirely done by machineries. The entire plant is made up of precast components including the parking area. The students had the opportunity to see all the components – columns, slabs, stairs, non-structural walls, voided slabs, footings, etc. The students had a highly interactive session with the technical team and quality team to understand the complete detailed technique used in making the products.



Fig. 3 Glimpses of technical visit

★ **Title of the Event:** Online session on “Repair and Protection of Reinforced Concrete Structures”

**Date Venue:** 28 April 2023

**Speaker:** Mr. Sunny Surlaker, President, India Chapter of American Concrete Institute & Director, Institute for International Talent Development [IITD]

**Proceedings of the event:** The event began with a brief introduction from the speaker regarding the topic: One of the biggest problems worldwide is the deterioration of structures made of reinforced concrete. The bulk of structures need substantial Repair and Protection in addition to routine upkeep. With time, these structures erode, and the Cracking, splitting, delamination, corrosion, etc. are signs of distress. To ensure the safety of the structure and to save time and money, repair methods and materials that are appropriate for a given construction are required. The goal of the proposed discussion is to review contemporary construction chemicals and methods for concrete technology, concrete protection, concrete repairs, and concrete waterproofing.

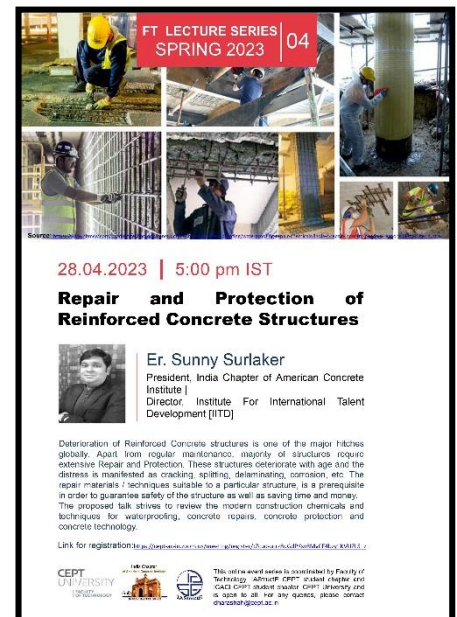


Fig. 4. Online session poster

## 2. IAStructE – IIIT, Hyderabad Student's Chapter

★ **Title of Event:** 'Hands-On-Training-Session' on "Understanding Non-Linear Analysis of RC Buildings"

**Date & Venue:** 26 April 2023 (Online)

**Speaker:** Mr. Mihir Jain, Technical Lead, MIDAS USA

**Proceedings of the event:** The speaker started the session with a brief introduction to Non-linear seismic analysis and modelling approaches along with their applicability. He gave insight into the concepts and importance of using different non-linear seismic analysis methods to understand the non-linear behaviour of structures. The session was then succeeded with a hands-on-session on ETABS software. He demonstrated the entire modelling of a G+9 residential building in Zone 5. Further, Modal analysis and Equivalent static analysis of the building were conducted. He explained the results and demonstrated the non-linear static 'Pushover' analysis of the structure in detail. The determination of performance point of a structure as per ATC-40 was also elaborated. In addition, the procedure to develop fragility curves was also explained in detail. Further, the discussion was concluded with a Q&A session with participants.



Fig. 5 Glimpses from the online session

### **Forthcoming Events:**

<b>Event</b>	<b>Topic</b>	<b>Speaker</b>	<b>Date &amp; Timing</b>
Orientation Program	1 <sup>st</sup> Session of Orientation Program on ASE-IAStructE Registration Link: <a href="https://us02web.zoom.us/webinar/register/WN_L0ru_sDVTm-v-VNYS8Bm_g">https://us02web.zoom.us/webinar/register/WN_L0ru_sDVTm-v-VNYS8Bm_g</a>	Mr. Abhijeet Kulkarni, Partner & Director- Structures Buro-Happold	04 May 2023 at 06:00 PM
19 <sup>th</sup> AGM Meeting	19 <sup>th</sup> AGM Meeting	-	08 May 2023 at 05:30 PM

### **Message from IAStructE Social Media & Digitization Committee**

Let's get "*****DIGITIZED*****"

With all new look of our website and media handles, please follow us on all major media platforms. For joining us, below mentioned links to be pasted in browser. Let's join hands together to promote the profession of Civil Engineering.

1. **on TWITTER** as **IAStructE**: - <https://twitter.com/iastructe>
2. **on Facebook** as **IAStructE**: - <https://www.facebook.com/IAStructE-100114022302316>
3. **on LinkedIn**:-The group is defined as Indian Association of Structural Engineers-IAStructE  
<https://www.linkedin.com/groups/6646248/>
4. **on YouTube** as **IAStructE Webinar**: - Subscribe and press bell icon  
[https://www.youtube.com/channel/UCvv7ojXO9Dxq1WtP\\_yHZTKw](https://www.youtube.com/channel/UCvv7ojXO9Dxq1WtP_yHZTKw)

### **Call for papers for CROSFALL:**

CROSFALL is a newsletter created by Indian Association of Structural Engineers (IAStructE). Its purpose is to share lessons learnt from structural failures, near-misses and safety concerns. CROSFALL is greatly encouraged and inspired by CROSS (Confidential Reporting on Structural Safety), UK, which is a collaborative effort of three institutions (IStructE, ICE and IFE). **There is however no connection between CROSFALL-IAStructE and CROSS-UK**

CROSFALL Editorial Board invites reports for the forthcoming issues. Interested candidates can send the reports about structural safety issues related to all types of structures (i.e. buildings, bridges, tunnels, industrial structures etc.) in the built environment. The reporting can be related to:

- *Structural failures,*
- *Poor Design and Detailing, Lack of Seismic Safety in planning*
- *Safety concerns about high risk erection schemes at Site*
- *Safety concerns on Temporary Works*
- *Near misses, or observations relating to procedures followed at site, which may lead to failures or collapses.*

Reports do not have to be about current activities so long as they are relevant. Small scale events are equally important - they can be the precursors to more major failures. Report might relate to a specific

experience or it could be based on a series of experiences indicating a trend. No concern is too small to be reported and conversely nothing is too large. Reports should aim to include information that will help others to learn from the safety issue identified.

To submit the report please go through the following link: [www.iastructe.co.in/crosfall.php](http://www.iastructe.co.in/crosfall.php)

## Call for papers for the theme based issue of SED journal:

SED Editorial Board invites article contributions for the forthcoming issue of the Structural Engineering Digest on the following theme, which shall be published in e-book format. Details are as under:

- ★ **April – June 2023 issue:** Theme: Liquid Retaining Structures  
Guest Editor: Mr. L. K. Jain

Interested professionals may send their abstract along with the full paper on the above issue along with their photograph and brief resume latest by 15 May 2023 or at the earliest convenience. Articles are invited from i) Members of IAStructE; ii) Specialists in the field even though they are not members of IAStructE.

Interested authors/contributors may kindly mail to [iastructe@gmail.com](mailto:iastructe@gmail.com) regarding i) Broad guidelines on areas of coverage; ii) size of the article; iii) format of paper submission. As per the laid down procedures all the papers shall be sent to the referee for review and the comments will be informed to the authors for incorporating the same. Papers shall be published after peer review & approval of SED editorial board.

## Advertisement Tariffs:

### Structural Engineering Digest (being published in PDF format)

	Rates Per issue	Discounted rate at 20% for 4 consecutive issues	Advertisement Size
Full Page	Rs. 20,000/- + 18% GST	Rs 64,000/- + 18% GST	9.5 inch x 7 inch

### IAStructE Monthly Newsletter (being published in PDF format)

	Rates for advertisement	Advertisement Size
Full Page	Rs. 10,000 per issue, 10% rebate for quarterly, 20% rebate for half yearly and 30% rebate for yearly booking	9.5 inch x 7 inch
Half Page	Rs. 7,000/- + 18% GST per issue, 10% rebate for quarterly, 20% rebate for half yearly and 30% rebate for yearly booking.	4.75 inch x 7 inch
1/8th of a Page	Rs. Rs. 2,000/- + 18% GST per issue, 10% rebate for quarterly, 20% rebate for half-yearly, and 30% rebate for yearly bookings. (Only for IAStructE Members)	Standard size of Business Card

## **IAStructE Publications:**

**1. Commentary with Worked Examples for IRC: 6-2017:** It is a document having commentary with worked example on IRC: 6-2017 (The code for Loads & Load Combinations for design of Highway Bridges). This commentary is in two separate volumes. Volume-1 pertains to the Commentary while Volume-2 pertains to Illustrative Worked Examples. It has 48 worked examples demonstrating application of various codal clauses

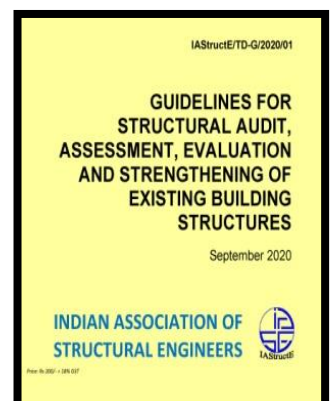
IAStructE/TD-CC/2020/02	IAStructE/TD-CC/2020/01
<p>COMMENTARY WITH WORKED EXAMPLES FOR IRC:6-2017</p> <p>STANDARD SPECIFICATIONS AND CODE OF PRACTICE FOR ROAD BRIDGES SECTION II : LOADS &amp; LOAD COMBINATIONS (SEVENTH REVISION)</p> <p>NOVEMBER 2020</p> <p>VOLUME 2 OF 2 : ILLUSTRATIVE WORKED EXAMPLE</p>	<p>COMMENTARY WITH WORKED EXAMPLES FOR IRC:6-2017</p> <p>STANDARD SPECIFICATIONS AND CODE OF PRACTICE FOR ROAD BRIDGES SECTION II : LOADS &amp; LOAD COMBINATIONS (SEVENTH REVISION)</p> <p>NOVEMBER 2020</p> <p>VOLUME 1 OF 2 : COMMENTARY</p>

It's a priced document and hence not freely downloadable.

The documents are available for sale @ Rs. 1200/- for Volume 1, and @ Rs. 800/- for Volume II. Members of IAStructE and IRC will be entitled for a discount of 10% on this amount. Interested professionals who wish to purchase the commentary may kindly register with the following link or contact IAStructE Secretariat at [iastructe@gmail.com](mailto:iastructe@gmail.com)

Registration link: <http://iastructe.co.in/new-iastructe-publication.php>.

**2. Guidelines for Structural Audit, Assessment, Evaluation and Strengthening of Existing buildings Structures:** This document will guide structural engineers in proper assessment of building structures before issuing structural stability certificate. These guidelines may be used by IAStructE members, all other structural engineers, house owners, housing society welfare associations, clients and corporation engineers for understanding structural audit of the private and public building structures. The Guideline focuses on the urgent need to strengthen risk resilience of buildings from any kind of risks due to earthquake and other hazards. It is hoped that this document will be useful to ensure that all structures across the country remain safe from any kind of disaster risk.



It's a priced document and hence not freely downloadable.

The price of this e-document is Rs 200/-. Interested professionals, who wish to obtain the soft version of the Guideline in pdf format, may register with the following link. Registration Link: <http://iastructe.co.in/guidelines-for-structural-audit.php>

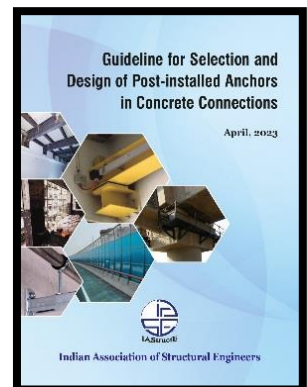
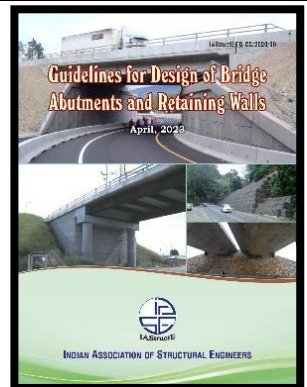
**3. Commentary on IS: 13920:** The commentary is available on [www.iastructe.co.in](http://www.iastructe.co.in) under IAStructE Professional Documents. IAStructE member can access this document after login.

**4. Commentary on IS: 1893 Part 1:** The commentary is available on [www.iastructe.co.in](http://www.iastructe.co.in) under IAStructE Professional Documents. IAStructE member can access this document after login.

**5. Guidelines for Design of Bridge Abutments and Retaining Walls:** This document will assist practicing bridge and structural engineers in building confidence in the design of these structures, which offers tools for the design of economic and innovative retaining structures. The document is rich in theoretical explanations and draws on much experience of the authors. Worked examples further illustrate the application of the applicable codes and should promote better understanding.

The document is available for sale @ Rs. 1500/-. Interested professionals who wish to purchase this document may kindly contact IAStructE Secretariat at [iastructe@gmail.com](mailto:iastructe@gmail.com)

**6. Guideline for Selection and Design of Post-installed Anchors in Concrete Connections:** In this document, only post-installed anchors are covered including their types, behavior and working principles, failure modes, basic design steps for non-seismic and seismic situations. A few illustrative design examples too are presented for better understanding of design methodology. This document is now available on [www.iastructe.co.in](http://www.iastructe.co.in) under IAStructE Professional Documents. IAStructE member can access this document after login.



### **Accredited Structural Engineers (ASE – IAStructE)**

The IAStructE program for Accreditation as Accredited Structural Engineers (ASE – IAStructE) is suitable for practicing structural engineers who have experience in the structural design field and have a good understanding of applicable design codes/standards in India.

This accreditation will help Structural Engineers in India to set a benchmark of proven professional & technical excellence and raise the levels of structural engineering practice in the Country. The entire program would be on the basis of a two-stage process consisting of an interview for the assessment of Initial Professional Development (IPD) followed by a written examination based on actual problem-solving. Applicants have to demonstrate their competence in the designated 13 core objectives on which they will be assessed during the interview. The applicant would then require to clear the examination by answering any single chosen question from the options given in the question paper with a minimum level of marks stipulated. Both stages are mandatory to clear the assessment process and thus to get recognition.

An Accredited Structural Engineer – IAStructE is someone who wishes to:

- validate their comprehensive experience and understanding of all types of structural engineering work and managerial capabilities
- demonstrate their competence on the basis of IPD and Continuous Professional Development activities in the field

Details of the application and assessment requirements, fees, and available dates can be consulted in the relevant fields given in the tabs below. They summarize the general application process, the assessment requirements, and the steps needed to qualify for the ASE-IAStructE accreditation.

The complete information about the entire process along with the application form and annexures can also be obtained from a booklet, **which can be downloaded from the following link:** <https://www.iastructe.co.in/ase-iastructe-accreditation.php>

This assessment process will be held bi-annually, being initiated in January & July respectively.



## *IAStructE Library*

IAStructE has set up a library at K-69 A, Basement Kalkaji, New Delhi. It has a collection of good technical books and journals related to civil & structural engineering. Members staying in the vicinity are encouraged to utilize this facility, and if you want to contribute your books and journal to the library you are always welcomed.



*IAStructE Library*



## About IAStructE

Indian Association of Structural Engineers (IAStructE) is the national apex body of structural engineers in India established with the objective to cater to the overall professional needs of structural engineers. The association has become the source of expertise and information concerning all issues that involve structural engineering and public safety within the built environment. It has no commercial aim or objective. IAStructE is purely a professional learned society with the prime objective of supporting and protecting the profession of structural engineering by upholding professional standards and acting as a mouthpiece for structural engineers. IAStructE endeavors to ensure that its members develop the necessary skill in structural engineering and work to the highest standards by maintaining a commitment to professional ethics and standards within structural engineering. IAStructE strives for continued technical excellence; advancing safety and innovation across the built environment. It also strives to make available to the Government, Public Sector and Private Sector - a credible source of well qualified and experienced Structural Engineers. A nationwide database of Structural Engineers has been compiled and is being constantly updated. IAStructE undertakes a broad range of technical activities which are aimed at information sharing and capacity building. The association provides opportunity for all the members to develop various skills in structural engineering and helps members to be at the forefront of structural engineering practice. Towards achievement of its aims and objectives, IAStructE is engaged in organizing the following: CPD Courses for Professionals at all levels Refresher Courses for Fresh Graduate Engineers, Student's orientation program, Seminars/Workshops, Technical Lectures by Experts, Technical Discussions on Contentious Issues. IAStructE is currently operating from four regional centers. These regional centres located in the Eastern, Western, Northern and Southern parts of the country effectively cater to the professional needs of members residing/practicing all over the country.

## Membership Benefits

Membership of IAStructE is a sought after professional accreditation. Your membership of IAStructE can help you enhance your intellectual, academic, technical and professional status. It provides inter connectivity to the fellow professionals and the fraternity. Some of the benefits of membership is provided below:

- ★ Complimentary magazine subscription: All members (except Student Members) receive a complimentary subscription to the Institution's flagship publication 'Structural Engineering Digest' (SED). Published quarterly, each issue allows members to remain connected to the association through the provision of technical papers, Industry and Institution News, Featured articles, Professional Guidance on everyday matters affecting the practicing structural engineers.
- ★ Access to the professional documents
- ★ Access to all Technical Lectures, organized every month, at no charge
- ★ Access to Technical Discussions held regularly
- ★ Access to the association's library (Including e-library)
- ★ Discounts in attending Seminars and Workshops organized by the association
- ★ Full on-line access to the current volume and entire e-archive of journal "Structural Engineering Digest (SED)", Refresher Course Materials, Technical Lectures, E-Newsletters and other Technical Resources of the Association.
- ★ Opportunity to network with professional structural engineers of eminence and to meet potential employers in the association.
- ★ Opportunities for professional development

## How to become a member?

Membership form and details are available at <https://www.iastructe.co.in/membership-grades.php>; for more information and other details contact the Indian Association of Structural Engineers Secretariat.

**Indian Association of Structural Engineers**

**K-69A, Basement, Kalkaji, New Delhi 110019**

**Tel: (011) 45794829; Email: [iastructe@gmail.com](mailto:iastructe@gmail.com); Website: [www.iastructe.co.in](http://www.iastructe.co.in)**

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BUILD IT WITH  
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