

"You have been well trained, my apprentice.  
Those finals will be no match for you."



# THE CALIFORNIA TECH

VOLUME C, NUMBER 30

PASADENA, CALIFORNIA

FRIDAY, MAY 28, 1999

## Web ventures

BY DAVID GUSKIN

The Internet is the birthplace of a powerful new marketplace - one which promises to revolutionize the way businessmen do business. To illustrate this point, Bill Gross, Chairman of idealab! and the youngest trustee of Caltech's board, gave an anecdote to the captive audience of aspiring entrepreneurs Wednesday in Beckmann Auditorium.

"I had gone shopping for a car on the Internet and found less than what I hoped," began Gross.

Gross hired a contractor to test-drive, so to speak, a web site that would allow the user to choose exactly the car they wanted. However, since it was a test, they didn't include any of the functionality (like credit card validation and so on) that a real site would include. Instead, Gross told the contractor to sell just one car using Wizard of Oz behind-the-scene web pages - and then to drive to a dealership, buy it and personally deliver it to the buyer's house.

The site went up on a

Thursday night, and the next morning, the contractor called Gross with the news: "We sold four cars!" "Turn off the site!!!" Gross responded, and *carsdirect.com* was born.

Although there were five very different speakers at the Caltech Entrepreneur Club's forum, each put forth the same message: Entrepreneurship on the Internet is not easy, but it is rewarding. The panelists also included Scott Zimmerman, CEO of Storagepoint.com, Michelle Kraus, CEO of Opensales.com, Rob Ferber, founding technologist of eToys, Luis Villalobos, founder of Tech Coast Angels.

Each speaker addressed some of the requisites for business on the Internet, but the most stressed was the ability to learn new skills at "web speed." For some companies, such as Netscape and Apache, this means opening up your product to a developers' community via open source. For others, this means getting the very best people working on utilizing the full advantages of the web. As Gross pointed out, the Web can make months into minutes.

## Caltech awards prize students

Scholars and Award winners shine and bask in greatness

### Fellowships



**Michael Atkin**  
*Watson Scholar*  
to Belize, Morocco,  
Guatemala, Tanzania  
Physics and Engineering

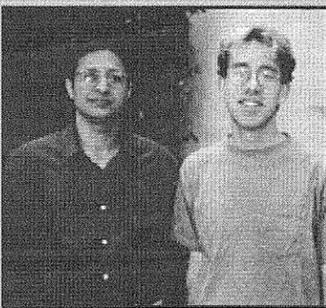


**John Niccolai**  
*Fulbright Scholar*  
to Spain  
Mathematics



**Michael Grebeck**  
*Fulbright Scholar*  
to Sweden  
Engineering & Applied  
Sciences

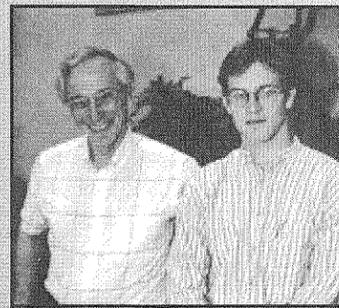
### Awards



**Daniel Levy**  
*Froehlich Award Winner*  
with Dr. Rajiv Dua



**Ming Chen**  
*Haagen-Smit Award Winner*  
with Maria Haagen-Smit



**Andrew Childs**  
*Green Award Winner*  
with Faculty Nominator  
Prof. Tom Tombrello

## The Year that Was...

BY WREN MONTGOMERY

When the fall term started, the largest frosh class in Caltech history arrived, along with a revamped Winnett, new convenience store (which proved to be more inconvenient as hours changed without notice) and the yearbook as well as the little t (online for the first time! Now all you'll need is a net connection in your car...) In the Outside World, Ahmed Zewail was pictured on two Egyptian postage stamps. The new plaza provided an excellent storage spot for some toilets... Eli Broad kindly donated \$18million for "biological sciences at Caltech." Optimistic student speculated that it would be used to improve Bil. In response, the dishwasher at Catalina broke, and the administration moved the annual event to Lake Arrowhead. Students hosted a benefit auction for victims of Hurricane Mitch —

netting \$4400. Finally, Nathan Schara and Eric Hale won the ME72 contest.

Returning from wild winter weather elsewhere in the country, techers savored the mild weather of Pasadena. Then it rained. Ming Chen won the Perpall Speaking Contest. ASCIT Movies reached a new low when the last reel of 'Das Boot' was not shipped — the ending was shown in Blacker Lounge. The Axline estate one-upped Eli Broad with a \$60 million donation for student financial aid. Graduating seniors sulked for a week. The Pope visited Caltech — virtually. A snowy egret moved into Baxter pond. While the rest of the world enjoyed the Elizebethan era through movies, Caltech enjoyed the return of Apollo and TACIT presented Richard III. Brennan restructured Student

Affairs. The Interhouse Drag Competition proved a great success, as was the "100 Ways tech can Kill you" article, especially among Phys103b students. Elections went forward without any disputes.

As usual, lots of people won fellowships. Congratulations. The Powell-Booth Lab reopened, with new skylights to get those CS types their daily dose of Vitamin D. A major campus user of chlorophyll, the Beckman Institute lawn, was bulldozed, in preparation for the Broad Center. Prof. Kirschvink hinted at life on Mars — but is it magnetic? Off-campus picks were revised again, and 38 people were left homeless after the first round. Athletics acquired a new director. The ASCIT Budget sparked protest, resulting in a survey, and in true apathetic form, nothing

changed. So, the ASCIT Movies will only be shown half as often next year. Think of it as the projectors being broken every other week. The Mars Society told NASA how to go to Mars. Phantom Menace emptied campus for a day. Luckily, Ditch Day was two days earlier. Usual antics ensued. A peacock was sighted at Avery. Now, CITnet2000 rolls on towards completion: workers with cable

have been sighted in places as distant as Beckman Institute. Tom Brokaw is to speak at Commencement. Dean Revel has not missed a Tech. And yes, the yearbook is in production.

Birds, fame, money, chaos — that was the year that was at Caltech...

...Or Was it?

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# Dean Waxes Poetic

A Bientot '99

Sorry to see you gals and guys go  
Some of you covered with laurels  
Coz you have done so very very well  
What we'll do without you I really don't know.

Some others made it just by a nose  
Graduating with a so so GPA  
Which does not mean they haven't earned anyway  
Some very very special kudoes.

While you were here we had a healthy dose  
Of the usual encounters and tensions  
Which so characterize the relations  
Between holders of- and drinkers from- the proverbial hose.

We also had much and frequent cause  
To laugh and all without guile  
Enjoy pranks and RFs with a smile  
And sometimes even things that did make us pause...

By now however all of you can be proud  
You went from Camp Fox to the end of your trek  
On this day in the Court of Man at Caltech  
Where all of us sing strong and loud

Sing praises with joy.  
Henceforth what you learned here,  
And even things you did not wake to hear,  
Will serve you well in your employ.

Whatever you become,  
Scientists or stars of commerce  
Astronauts or doctors diverse  
Of Techers you'll bring the power awesome.

So hail to you all on this June day  
Though having you disperse makes me feel morose,  
Still I wish everything come up sweet as a rose  
As you go on your merry way.

Good bye Aimee, Adriane and Karl  
Brian, Erik and Francisco  
Cynthia Gong, Minxi Gao  
Autumn, Shayan and Merle

Good bye Krishna, Klejda, good bye to you,  
Joseph Kalmon Blitzstein, Radoslaw Osada,  
Amy, Julius, Jorge Palamara,  
Claudiu, Brigitte and Thota, too

Farewell Kara, fly high Koen,  
Hang in there Tanya and you too Biswal  
Emma Goldberg, Robert Gorsche, give it your all,  
May you all to success be prone.

To you and all the other graduates  
From Nasim A. to Conrad Z.  
Fond greetings, keep hale and hearty,  
May your life be cause to celebrate!

## ASCIT Minutes - Condensed

### Minutes of the ASCIT BoD Meeting, May 24, 1999

Present: BoD minus Danny, Melvin, with Valerie Anderson, Heather Dean, and Bryan Eastin

Meeting called to order at 22:14.

#### Dealing with Guests

Val - Representing the Caltech Vegetarian Club, Val presents budget for vegetarian cooking classes to be held once a term next year with attendance open to the Caltech community but on a first come-first serve basis as the size of the class is limited to 12. It would be taught by Patrick Gannon with costs for materials and facilities of about \$70 a class. Val requests \$200 to fund all three classes for next year.

Heather and Brian - Wants funding to hold an event like Gradiators during the second weekend of first term. It would basically be a one day event with lots of water activities ending in a big barbecue. The BoD requests a

### Minutes of the ASCIT BoD Meeting, May 31, 1999

Present: BoD minus Jeremiah (Jaideep comes in at 22:17 and Baldeep follows at 22:22) with Heather Dean, and Bryan Easton

Meeting called to order at 22:15.

Alan calls the meeting to order for only the second time in over a year.

#### Dealing with Guests

Heather and Brian - Bring a budget requesting funding to hold the Y Fall Event, which will be like Gradiators except for the undergrads. The date is set for September 26, 1999, the Sunday beginning rotation before classes begin. This event would occur during the day and include lots of "wacky" sport events like innertube water polo and human battleship with water balloons with a big BBQ as well.

They also request funding for the Y Huntington Tea to be held on October 17, 1999, the Sunday after SURF seminar day. This event would be focused on encouraging interaction between the undergrads and the fac-

ulty, grad students, and Caltech alumni since all will be invited to the event.

#### Project Reports

Executive Committee appointments - The BoD approves the new ExComm: Clifford Hicks, *chair*

Abraham Ankumah

Nic Breen

Puneet Newaskar

Archive Project - It is too late in the year to formally organize work to be done on the archive project for this summer so it is deferred for now.

Class elections - Signups are on the door of SAC 33 for senior class president, senior class secretary/treasurer, junior class president, and junior class secretary/treasurer. They come down Monday, May 31 at 10pm. Statements are due to the Tech by 11:59pm on Tuesday. (editors@tech)

ASCIT Formal - Everything seems to be running smoothly. Current total

Project Reports

Formal - It was held last Friday at the Ritz Carlton Huntington. It was right on budget with about 160 people in attendance. In general, the feedback about it was positive, with some mixed reviews on the band.

Axline funds - The BoD is concerned about the distribution and usage of these funds and will be looking into this issue.

Housing survey - The IHC is planning to send out a housing survey on the new roompicks process. The director of residence life has reported that 30-40 people who were guaranteed housing since they turned in their cards are currently without a place to live for next year. Apparently there is nothing to be done about this at this point and since rooms will probably become available by the time the next school year begins, there is not much to worry about. There is also the possibility of filling up unused grad student housing.

Student-Faculty Conference - Plans for this conference to be held the next school year include looking into certain "problem" options such as physics, electrical engineering, biology and others. Retention of people in the individual majors will one issue particularly researched. Also, recent graduates

attendance is estimated to be 170.

SAC Courtyard - Jason Cardema took some awesome black and white photos of the SAC courtyard and we will be sending them to Mr. Rosenwinkel (Alan's father, the architect) to continue with creating a proposal to renovate the courtyard.

Meeting closes at 22:41.

The BoD approves \$70 for funding of the first vegetarian cooking class with further funding pending ASCIT member participation and interest.

Meeting adjourned at 22:45.

Respectfully submitted,

Hanna Kim  
ASCIT Secretary

will be contacted in order to gauge the relevance of the Caltech education in industry or graduate school. Students and faculty will be e-mailed in order to maximize the input received.

Meeting closed at 22:54  
The BoD approves \$600 for Y fall event and \$100 for the Y Huntington Tea.

Meeting adjourned at 22:58.

Respectfully submitted,

Hanna Kim  
ASCIT Secretary

## Minutes of the ASCIT Excomm

June 2, 1999

A protest has been submitted regarding the announcement of joint-candidacy in the election for Senior Class President. Two concerns are outlined in the protest: the first is that the candidates forming a team did so after the nomination deadline, and the second is that the office naturally belongs to a single person.

The Excomm decides not to consider the implications of changing to joint-candidacy after the deadline vs. before the deadline. The issue of late nominations was decided in the Excomm ruling of February 3, 1999. Thus the question before the Excomm simplifies to "should a team be allowed to run as a single candidate for the office of Senior

Class President?"

The benefits of joint-candidacies includes allowing interested parties to work together to complete the duties of an office. This reduces the workload of the office, and involves a greater number of interested people.

This benefit is at some cost, though. Spreading the duties of a single office over several officers reduces each officer's accountability. It also allows for significant political maneuvering. Some limit on the number of officers holding an office is definitely necessary: in the limit, all candidates could run as a single team. In the absence of a limit on the number of team members, the resolu-

tion with which the electorate can express its preferences can be severely limited.

**RULED THAT**  
Class Offices shall be populated by a single officer.

R. Submitted,

Baldeep!

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ISSN 0008-1582

VOLUME C, NUMBER 30  
MAY 28, 1999

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Printed by News-Type Service, Glendale.

## Thank you from the Senior Class

Dear Morgan Kousser, Alice Huang, and the Members of the Commencement Committee,

The Senior Class is deeply grateful that the Commencement Committee will cover the cost of seniors' meals at this year's Senior Banquet. As our time at Caltech began with shared meals at Frosh Camp, it is especially generous of you to ensure that we could all be together for one final meal. We realize that this gesture comes at considerable expense, and thank you again for your generosity.

Mike Astle  
Erik Streed  
Autumn Looijen  
Senior Class Officers



# CLASS Election 1999



## SENIOR CLASS PRESIDENT

### Mark Hammond

Three years ago we, the Caltech Class of 2000, arrived at this venerable institution. We were energetic, determined, and more than a little naive about what awaited us. And after three demanding years, we all look ahead with reverence to our Holy Grail - Senior Year.

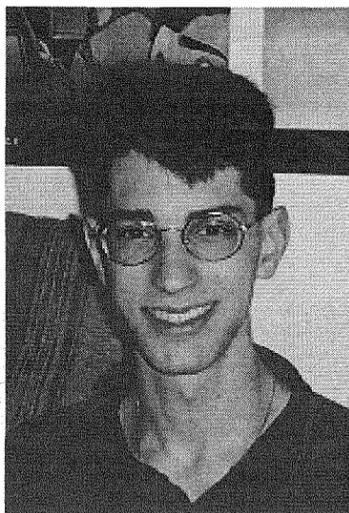
Ditch Day, Senior Banquet, and dare I say Graduation all await us. We've earned it and more. Senior Year should live up to and surpass all of our expectations. That's why I am running for Senior Class President. That's why you should care.

Things will need doing, and we need someone who will make sure not just that they get done, but that they get done correctly, on time, on budget, and that they flow seamlessly. Perhaps I am a bit of a perfectionist, but after three years we deserve no less, and I am willing and eager to assure us an unforgettable experience.

Those of you who know me well know that I am typically a behind-the-scenes worker. I am not out for personal

glory. As it is relevant, however, it should be known that I am directly responsible for the current availability of Microsoft Visual Studio and Windows NT to all undergraduates free of charge. (And as much as you may dislike the Evil Empire, the ability to legally acquire very expensive software for free is a good thing.) I arranged for every house's computer lab to have a copy of every non-multimedia Microsoft software title made. I've provided and helped prepare ITS with resources to improve our campus computer network. And, I am currently working with the CS and EE departments, again in conjunction with Microsoft, to prepare a campus wide wireless network and provide free mobile computing devices to all undergraduates.

In short, when I believe in something I work to make sure that it gets done, and that it gets done right. I sincerely believe that our class has the drive and the spirit to make next year fantastic and to assure that the Class of 2000 is never forgotten. I



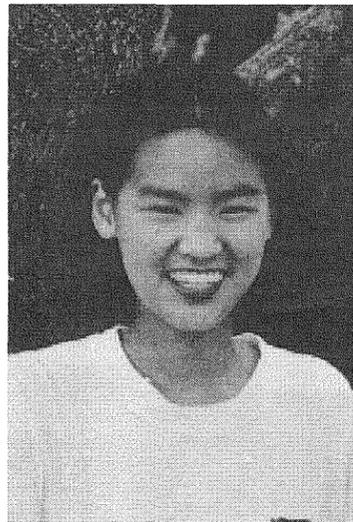
want to make sure that our Senior Year lives up to all our expectations and more. I am ready, willing, and eager to spend the time to make sure that happens. It's our Senior Year - let's make it one to remember.

### Audrey Lee

Once upon a time, there was a girl. She always had a smile upon her face and loved life. In high school, she loved planning activities and working with others as the student body Vice President. Then one day she received a letter in the mail, a letter she could not reject and a hesitated to accept. She took a deep breath for courage and signed away four years of her life. After she arrived at her new life, she thought her past existence was behind her, no more fun or creativity, only matrices and infinite square wells for the next four years.

To keep her girlish figure, she decided to play on the tennis team. She enjoyed it greatly and loved being on a team where she made many new friends. She wasn't very talented so she just worked hard and did her best, dedicating herself to the team and encouraging others by her own example. She was very proud and happy when her team voted her Most Improved Player and Most Inspirational Player. She was also asked to be the team mentor and to become a part of ACME, where she looked forward to working with other dedicated athletes to put on events like the Spring Carnival and the Sports Banquet.

Finally, this silly girl realized that there was more to this place than just equations and books. There were people that needed to smile and love life just like her. So she put some color back into her life and began to see her



four-year contract as an opportunity to accomplish something great. She was encouraged when she learned that her tennis teammates had voted for her to be their captain next year. She was thrilled that others wanted to look to her for leadership and enthusiasm. She pondered this for a while and found the courage to run for Senior Class President. It would be her last year and she wanted to lead her classmates in making their mark as the Class of 2000 before they left. She knew the energy, creativity, and dedication within her would make it all possible.

### Matt Paul

Yo...wuzzup kidz...it's mattpaul here and I want to be your Senior Class President. I'm really excited and ready to do a kick \*ss job - I've got the love and will give it all for my team. First of all, let me tell you a little bit about myself and explain why I am the candidate for you.

Bio (read best in a chessey sports commentator voice): Mister mattpaul has represented the House of Love as Ath Man, Head Waiter, and Vice-President. He is an active founding member of the Hawaii Club. In the Fall of 1997, he brought you "Women's Boxing - Dabney vs. Page," the superfly disco challenge of the millenium that shook the walls of Brown Gym <gratuitous.hype>. He plays guitar in local dance-pop sensation *Cocoabitch Burnout* <shameless.plugin>. Between the late nights of his hectic hard-rock lifestyle our hero can be found teaching young children how to read, helping the elderly cross the street, and making the world safe for democracy <just.plain.not.true>. He's fitter, happier, more productive. He stands for clean air, sunshine and good times. He's mattpaul <less.than.sober> - your candidate for Senior Class President.

As far as my actual qualifications are concerned, I am confident that I can carry out the duties required of the office. I've planned, organized and been accountable for house events such as Lounge Night and Freshmen Initiations. As Dabney VP I was head UCC and was on

**Omissions**  
The following candidates did not submit statements to the *California Tech*:

**Catelyn Gifford**  
Candidate for Senior Class President

**Angela Shum**  
Candidate for Senior Class Vice President

Also, due to space constraints, and since he is unopposed,

**Dan Daly**  
Candidate for Junior Class Vice President

## SENIOR CLASS VICE PRESIDENT

### Robert Saliba

My skills at writing could never do justice to the great trials that each of us faced in order to reach this point in our Caltech careers. Although some of our number is no longer with us, the majority have overcome all nighters and the unspeakable mental trials of Caltech life. We are the survivors, the battle hardened veterans. Standing tall with a flinty gaze we look into the future at our final year at Tech.

It is the future that impels me to run to be your senior class vice-president. I wish to dedicate my senior year to relaxation, even sloth. It is time to kick up the heels which tread so far. For many months I have prepared for senior ease. I have watched my cat stretch in the sunlight. I have heard the laughter of the those who passed before us and learned their sweet melody. Even as I write this my fingers twitch with anticipation for the day when they will type no more.

This beautiful dream of a year of milk and honey is nothing without my classmates to share it with. No man is an island and none of us will share the joyous celebration that is our due without a strong unified desire to take our destiny back from the dusty books and acrid laboratories. For this end I would like to



participate in our self-governance as class vice-president. My loyalty is to you, to what you want to do with your time whenever and however you wish. I am a slacker's slacker. I understand, even celebrate, the reward that next year will be. Vote for me to take it easy.

## JUNIOR CLASS PRESIDENT

### Jason Chua

My reasons for running can be summed up in three succinct statements: Hello, hello, hello.

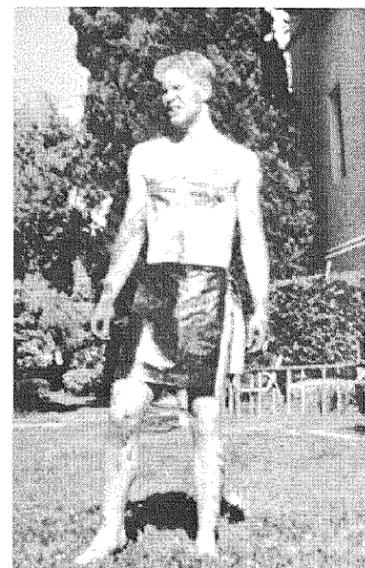
Yes, indeed, three is the perfect number, according to Pythagoras, since it encompasses the ideas of beginning, middle, and end. Yet some renowned thinkers argue that the word "hello" should not be used in common language, as the first four letters constitute a swear word. But should we put stock in what thinkers advocate? For, as it was so aptly voiced by Nietzsche, "There is thinking, therefore there must be a thinker." But all philosophy aside, let me discuss my motivations for running for the office of junior class president.

In all actuality, I've asked myself that same question many times, and to be honest, I've had a hard time finding an answer that feels suitable. After all, I'm not popular by any orthodox definition (as you can tell by my colorful word usements). I did consider myself popular once, but then I realized that the figures paying such rapt attention to me were only inflatable ottomans at Target. Ahem, anyway, when I signed my name on that little sheet on that door in the SAC, I saw that I was running against a couple of pretty well known guys, and I wondered if I even stood a chance. Well, by not being popular, I can as-

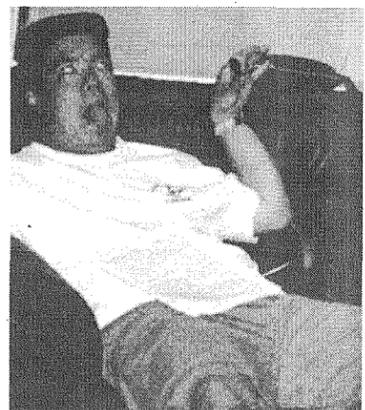
sure you all that my motivation for running isn't that I feel I'm expected to run, or even that I expect to win (and after all, running is bad for the knees if not gone about in just the right manner). On the other hand, the very nature of my running gives me all the more reason to do a good job if it is given to me. I do indeed have a vision for our class.

Barring class trips to Djibouti and major motion pictures featuring us in grass skirts, there are deeper things I see for the class of 2001. At the most basic level, I would like for us at least to be able to feel that we can identify ourselves as a class. The Hovse system is definitely one of Tech's strengths, but it divides us in a way that limits our interactions with those who are we are going to see at our 10th, 25th, and 42nd class reunions. This obstacle is not hard to overcome, but someone needs to be willing set the goal and organize an effort toward achieving it. Someone's going to have to organize class trips, social events, and get-togethers, represent our class at whatever-it-is-that-class-presidents-represent-there-class-at, and you know, stuff, if we are going to become a powerful influence to this campus. I also will make every effort to be open to suggestions, since I strongly believe that the class can only be as good as ideas and enthusiasm of the people who comprise it.

In closing, an illustration: The office of jun-



ior class president can be illustrated as a Super Soaker XP-40 ("XP" stands for "extra pressure"), as illustrated in the accompanying photograph. It's right next to someone's smelly feet (not necessarily mine), and seems always just about to get stepped on. However, inherent within a Super Soaker XP-40 ("XP" stands for "extra pressure") is the ability to ameliorate the stinkiness of that which is about to tread on it; indeed, it can make things better, provided the right filling. I see myself as filling the super soaker (ignore the fact that I'm about to step on it) and making it the best it can be. Is that something you guys (gals, and others) can dig? If so, I would appreciate a vote. If not, I guess I could always concentrate on stuff like grades and getting into med school.



sure you all that my motivation for running isn't that I feel I'm expected to run, or even that I expect to win (and after all, running is bad for the knees if not gone about in just the right manner). On the other hand, the very nature of my running gives me all the more reason to do a good job if it is given to me. I do indeed have a vision for our class.

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