



MSBAPM NEWSLETTER

August 2017 Edition



Cohort 2017 Verge Consultants with Dean Elliot
Surya (third from right) writes about his experience.



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SHORT NOTES BEFORE DIVING IN



Welcome to the BAPM Community!

The Newsletter team wholeheartedly welcomes the MS Business Analytics and Project Management Fall 2017 class.

We are sure the orientation session conducted was everything you needed to know and it was as helpful in helping you adjust into the coursework as it did when we started with the program.

We think it is very exciting that the Program has now extended to Stamford and it brings in great new prospects along with it.

We hope you have great fun learning everything you do here and as you explore various possibilities during the coursework. Good luck to one and all!



We have a graduate!

The Newsletter team also bids farewell to one half of the team of editors; Milind Jagre.

He has been the co-editor of the BAPM Newsletter since March of 2017 and has been instrumental in its new outlook and continuous progress.

He graduated with the end of the Summer semester from the program and is now on his way for other opportunities, furthering his career.

We all wish him a good luck with his future endeavors and hopes he finds great success.

Verge Consulting: A Seamless Summer Sojourn

- Surya Adavi



It was early February. Most of us just moved to the US and were acclimatizing ourselves to Hartford and the new weather patterns. For a lot of us, snow days were a celebration and not an inconvenience. One such snowy day, as I entered the School of Business with a dozen layers of clothes, I spotted a poster. It mentioned an opportunity to work with local businesses from the State of Connecticut and work as a Student Business Consultant during summer. Looking at the poster, I immediately pulled my phone out and checked out the Verge Consulting website.

I read more about the Connecticut Center for Entrepreneurship & Innovation and was delighted to know it was UConn supported program. CT SBDC (Small Business Development Council) is a state level entity for America's Small Business Administration, which is under the purview of the President of the United States. CCEI and SBDC have partnered to tailor the Verge Consulting

Program to benefit the local businesses and students of UConn School of Business.

After a month of submitting my application, I received an Interview call. I was interviewed by the State Director of Small Business Development Council (SBDC) and a senior Business Advisor for CT SBDC. I received a confirmation email soon after.

We were 6 consultants from the School of Business (3 MSBAPM & 3 MBA students). During our orientation with the CCEI Director and all the Business Advisors from SBDC, we were briefed about the program and various tools that would empower us to work with various clients. We also had an exclusive opportunity and privilege for an exclusive 30 minutes interaction with the John Elliott, Dean - UConn School of Business. Our conversation with the Dean helped us gain an informed perspective into business consulting. He advised us to focus on providing actionable inputs to the clients, thereby allowing them to implement those inputs and see the results.

One of my strong reasons for choosing MSBAPM over an MBA program is the right mix of Technology and Business. Equal focus on Business Analytics and Project Management allowed me to apply this to real-time business principles. As Verge Consultants, we were servicing our clients regarding technology consulting, financial consulting, digital innovation, market research, and strategy consulting. Verge Consulting is one of the best industry immersion programs available for MSBAPM students.

This consulting experience helped me apply academic concepts in an industry setting and receive quick feedback. This not only helped me hone my skills but also prepared me regarding industry expectation and focus areas for aspiring technology

analysts and consultants.



I would highly recommend everyone to check out the various programs offered by CCEI for students. If you are looking at steering your career in the US as a business analyst or a consultant, Verge Consulting is the go-to program during summer. With comprehensive support from the School of Business and Small Business Development Council, I can say this was one of my best experiences at UConn!

If you want to know more about our team's Verge experience, I strongly encourage you to join us on 18th September '17 at 12 PM @ Observation Deck. Over lunch, you can meet and greet all Verge Consultants, CCEI and SBDC teams. As someone said, "Opportunities don't happen. You create them". Here is one such.

Go ahead and apply:

<http://ccei.uconn.edu/programs/verge-consulting-group/>

A Primer on Time series Forecasting – Yashwanth Musiboyina



In my previous post, I've tried to explain some basic elements of time series modeling. If you didn't read it, please refer to the previous edition of the BAPM newsletter before reading any further. In a nutshell, we discussed how non-stationarity is different from stationarity and ways to diagnose them. In this post, I will discuss the intuition behind different models.

Let's consider the monthly sales of a hypermarket store as an example to illustrate these concepts.

Modeling Non-Stationarity:

The easiest way to identify non-stationary components is differencing, that is, subtracting sales that belong to different time periods.

For example, differencing of order 1 means subtracting sales between every consecutive month.

How does this model stationarity?

If sales in Jan'16 can explain a certain portion of Feb'16, a characteristic of trend component, the difference between sales of these two months gives the unexplained portion. Reiterating about the diagnosis plots: auto-correlation for residuals obtained through differencing would now have insignificant values at most of the lags because it has been stripped off the explainable portions. This idea can be extended to differencing of any order (say order 13 to model seasonality.) While differencing helps capture non-stationarity, it may not work very well for complex non-stationary series.

This introduces us to the set of models bucketed under "Exponential smoothing."

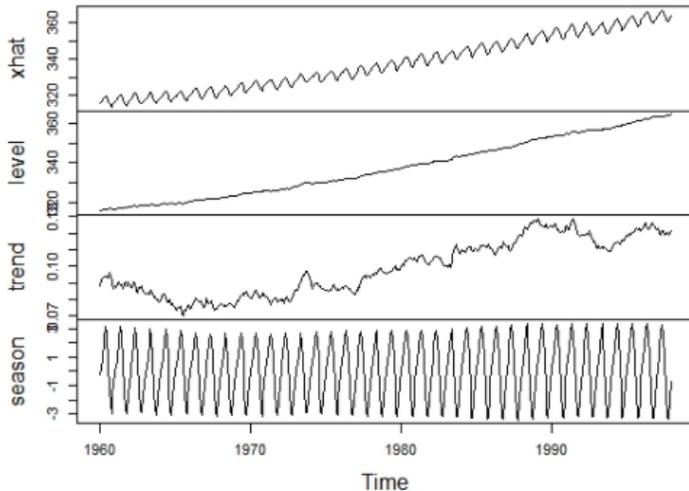
Exponential smoothing entails finding weighted averages of past observations, with higher weights (obtained through some optimization) to most recent observations and smaller weights to older observations. The degree of complexity increases from simple exponential smoothing to Holt-Winters damped trend with variations in the combinations of the trend and seasonal components.

The mathematical equations are beyond the scope of this article.

Finding the right exponential smoothing method requires answering these key questions:

1. Does the series exhibit level (think vertical length of a series)?
2. Does the series exhibit trend (think slope)?
3. Does the series exhibit seasonality (think repetitive patterns over a fixed period)?
4. Is the seasonality additive (variations roughly constant through the series) or multiplicative (variations changing proportionally to the level of the series)?

The below figure decomposes a non-stationary time series (that in the picture) to the elements mentioned earlier.



adding seasonal ARIMA components. This is something a small merchant could do if he/she tracks sales information.

Data-rich organizations can go beyond this to include other information (for example market share) that can make these models more accurate – such techniques are termed as Dynamic regression models (given how dynamic yet relevant the information can be). What if something drastically different happened in one month disrupting our whole time-series. Forecasters have come up with ways to handle such anomalies too, through ‘event modeling.’

I would stay honest to the title of my article, which said ‘primer’ and will end this, quite abruptly. Please feel free to reach out to me with any questions, comments or feedback.

Modeling Stationarity:

Why are stationary time series so important? Because they can be generalized to other time periods more effectively than non-stationary models. Stationary models include a family of Autoregressive Moving Average (ARMA) models. The term auto regression indicates that it is a regression of the variable against itself. In our example, sales forecast for this month is a linear combination of **actual** sales of last ‘p’ months. The key word **actual** when replaced with **error** gives what is called as Moving average model. This moving average shouldn’t be confused with moving average smoothing: Moving average smoothing estimates sales for current week as a simple average of previous weeks’ sales.

Medley of stationary and nonstationary models:

Non-seasonal ARIMA is the result of Auto regression, moving average and Differencing models forming allies to fight uncertainty, where ‘I’ stands for integration. What if seasonality is on uncertainty’s side, we strengthen our own allies by

References

Forecasting: Principles and Practice, Hyndman & Athanasopoulos (2nd ed., 2017)
 A Complete Tutorial on Time Series Modeling in R by Tavish Srivastava @ analyticsvidhya.com

7 Questions with Faculty: Jennifer Eigo



Briefly, give us an introduction about yourself, please.

I am a two-time UConn OPIM graduate. I completed my BS, majoring in Management Information Systems, in May 1999 and graduated with my MSBAPM degree in May 2016. Before returning to grad school, I worked for 15 years in Information Technology, mainly in IT Infrastructure. Most recently I worked for Travelers as a Manager of Business Performance and Analytics. I've also been teaching in the BAPM program for the last year. I am thrilled to transition to full-time faculty for the fall semester and to be a part of the MSBAPM expansion in Stamford!

How did you land your first teaching job?

In my last semester of BAPM, I had just one class to complete, so I took on a Teaching Assistant position working for John Wilson, assisting with Project Risk and Cost Management. John graciously invited me to teach one class. Although my sights were clearly set on a future job in analytics, a chance to try teaching seemed like too good of an opportunity to pass up. With positive feedback from my one-day teaching stint and an excellent reputation as a student in the program, when an Adjunct role was needed to teach Project Risk and Cost Management I was offered the job!

What excited you to be part of the BAPM Faculty?

As a student, I had the utmost respect for the BAPM faculty. There are some really brilliant professors in the department! To be able to join that community and be a part of their work is really exciting! Also, from that very first class that I taught as a Teaching Assistant, I fell in love with teaching. I really like sharing my knowledge with students and helping them build the skills that they need to reach their career goals.

What would you like to improve at BAPM?

I would like to see an even stronger partnership with companies seeking top analytics talent. How awesome would be if our students had companies actively recruiting on campus, competing with one another to land the best students?

What advice would you like to give to graduating BAPM students?

I'd like to pass on some very good advice that was given to me recently – be confident and be yourself. As you look to leave UConn and start a new adventure, you will certainly be faced with new

challenges. Maybe you will be moving to a new place, starting a new job, meeting new people. In all

of those things, be confident in what you know and who you are. You are very well equipped to succeed so be confident in that and take on challenges that give you the opportunity to show what you can do!

What are your hobbies and interests apart from making BAPM great?

I am married to a wonderful man, and we have two sons who keep us very busy outside of work! Depending on the season you may find me at baseball, soccer, or fencing supporting my boys at their activities. We also love to travel! In the last year, we went on a cruise to Bermuda and spent a week exploring London. When I do get a few minutes of free time, I like to read. Right now, I am reading *The Amazing Adventures of Kavalier & Clay* by Michael Chabon, and *Everybody Lies* by Seth Stephens-Davidowitz.

Tell BAPM something surprising that we do not know.

As a BAPM student, I participated in a Priceline data challenge, and my team won the competition! It was a great experience to put what I had learned in Predictive Modeling to immediate use. And I think it was a big help when I was interviewing for jobs. It gave me a relevant and current story to tell that demonstrated that I could not only do the analytics but also be confident and clear presenting the results to Priceline's leadership. Stop by my office in Stamford if you'd like to see my fabulous prize – a William Shatner bobble head!

Interview with Alumni – Bhavana Reddy



Tell us about yourself.

Hey BAPM, I am Bhavana. I work as a Statistical Analyst at Strategy and Insights team for Domino's Pizza LLC. (Yeah, it is Domino's Pizza, and I don't get free Pizzas: -P). For the most of my job, I work on store level data to improve the efficiency/quality of the stores from the customer as well the employee perspective.

I do have a very diverse background before BAPM. I worked for Cognizant Technology Solutions as a Web developer where I had a very little exposure to analytics, and I did my Bachelor's in Electrical Engineering. So, BAPM was quite a transition of career for me.

What did you like about BAPM and how can BAPM improve?

The first thing I liked most about BAPM was having a class of students coming from diverse backgrounds. This gave me an opportunity to not only learn from the course work but also my classmates.

Secondly, the course design with core analytics coupled with a Project Management. This is a huge step up when it comes to finding work after graduation.

I wish BAPM could improve more in the lines of Career Development Support for current students.

In your opinion, which BAPM course helped you the most?

All the BAPM courses were helpful for me in one way or the other. But, my top favorites were Predictive Modelling and Data Analytics with R these two courses lay a great foundation for me.

Tell us your job story. How can current students work towards that direction? Please add the complete job-hunt story too.

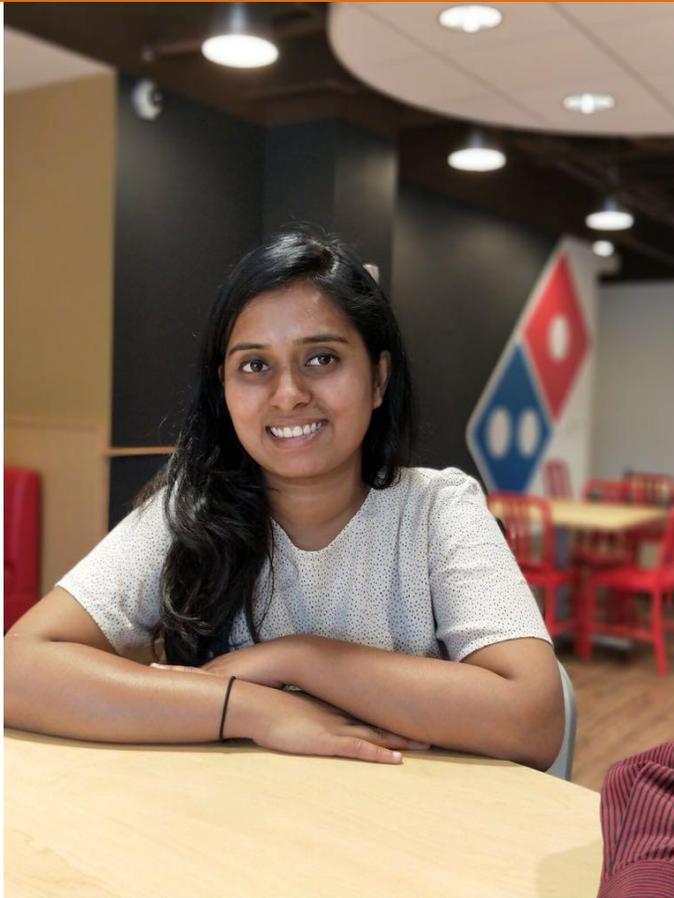
I applied for around 800 companies in about three months. I do believe my job hunt had various phases.

During the initial days, I applied to a lot of companies never getting any calls. This was mainly because maybe I was a bit too early in applying.

During the phase two, I slowed down analyzed my mistakes. I started keeping track of my number of applications /calls backs. I also tried constantly editing my resume accordingly and learning from the companies that I got rejected during the first few rounds.

During the phase three, I had quite a few interviews in various stages. I had to prioritize depending on the company and phase/type of the interview.

To sum up for the current students starting your application process early, applying consistently and always being prepared with your resume and standard behavioral questions would give you an edge over others.



the good places to hang-out. Take full advantage of summer /Fall to be outdoorsy 😊

What would like to share which we haven't asked you?

Having the right attitude and perseverance is all that matters at the end. I wish success and happiness for all the BAPM folks in their future endeavors

As an alumnus, in what way, would like to be involved with the program? Any suggestions to improve the alumni participation with the program?

It would be great to be involved in any viable way. Probably having a strong database of all the alumnus and the current role/company they work for and the best way to reach them. This would really help the current student to build a great network.

How and where you used to hang-out here in Hartford? Any suggestions?

The most popular vote goes to the City Steam. My personal favorites are Bar-Louie and P.F. Chang's. Elizabeth Park/River front/ Reservoir are some of