

# The Financial Engineering Team Report

## October 2004

### *Current Program Issues*

#### *Meet the Class of 2005*

##### **Billy Chan**



I received my bachelor (honor) degree, Magna Cum Laude, from Kent State University in applied mathematics with a minor in computer science, concentrated in optimization modeling and numerical computing. I was a system administrator and computer programmer at Quality Data Management Inc., where I developed data analysis and programming skill in VB, Excel, Access, C++ and Java. During my undergraduate studies, I received a Letter of

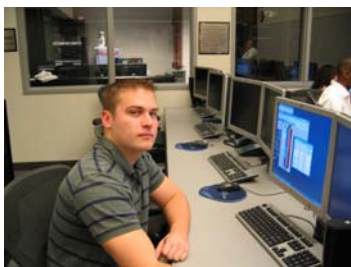
Academic Achievement from the Mayor, the National Dean's List Honor Award, the United States Achievement Academy National Collegiate Mathematics Award, and the Collegiate All-American Scholar Award. I have currently been selected to be a graduate assistance in the Academic Success Department, where I will be responsible for tutoring math for five years and earned a CRLA Tutoring Certificate. I am also a math, physics, and statistics tutor in other organizations. I am originally from Hong Kong and fluently speak both Chinese and English. I enjoy poker, traveling, skiing and skydiving.

##### **Adam Freeman**

I received my Bachelor of Science in Industrial and Systems Engineering with a minor in Computer Science from the Ohio State University. During college I worked as an intern at UUnet and Chase Mortgage in Columbus, OH. After graduating from The Ohio State University I enrolled at Kent State's Master of Science of Financial Engineering. After graduating from the MSFE program I would like to work in the investment banking business.



##### **Charlie Lawrence**



I graduated the School of Engineering at Rutgers University in New Brunswick, NJ in May 2004 where I majored in Industrial Engineering. I was accepted to the honors program on two scholarships; the New Jersey Outstanding Student Scholarship and the Edward J. Bloustein Scholarship. I have also worked with Bristol-Myers Squibb Co. in their supply chain department analyzing global sourcing strategies.

# The Financial Engineering Team Report

## October 2004

### Yining Lin

I am Yining Lin, a student of MSFE program in Kent State University. Prior joining the MSFE program, I majored in economics and worked for one year in the Strategy Planning Department of China Life Insurance Company, the largest life insurance company in China. Upon completion of the MSFE program, I hope to find a challenging position where I can utilize my analytical, quantitative and financial skills.



### Jinli Ma



My undergraduate major is Mathematics. After my undergraduate I worked at the Industrial & Commercial Bank of China (Qingdao Branch) for almost 11 years as a loan officer and economist. I received my master degree in Computer Information Technology from Regis University in Colorado before I came to Kent. Although I have all needed background of Economics, Accounting, Statistics, Finance, Computer Literacy, and Math, I am very confident about my Math because I like it and never feel tired when I work with it.

### Ishaq Pakawala

**Background and Experience:** I received my BSc in Mathematics and BBA in Finance from the University of Houston in spring 2004. During my undergraduate studies I taught several mathematics courses as a teaching assistant. Currently I am pursuing my MSc in Financial Engineering at Kent State University and working as a graduate assistant. My current research is on the development of derivatives markets in India.



**My Goal:** I want to develop new financial instruments to evaluate and hedge risk. I wish to follow it up with a PhD, to pursue a career in research and teaching.

### Amish Patel



Originally a New Jersey native, I earned my bachelors degree in Industrial and Systems Engineering while studying economics from Rutgers University. I interned for two years with the United States Department of Energy at their Center for Advanced Energy Systems. I began as a project engineer where I consulted with manufacturing facilities and pharmaceutical companies in the New York City metropolitan area. Later I transitioned into research in energy markets. I have entered the MSFE program because I look forward to applying my technical background and problem solving skills in the financial industry.

# The Financial Engineering Team Report

## October 2004

### Yaqin Su

My name is Yaqin Su. I majored in International Finance. I taught "Money and Banking" in China for five years. I came to the States in 2003. At present I am finishing my MA in economics and starting the MSFE program at Kent State University. I am an outgoing person and I enjoy learning.



### Ying Connie Tang



I earned my Master degree in Money and Banking from the Graduate School of People's Bank of China. After graduation, I worked as a risk manager and financial analyst in China Construction Bank (one of the biggest banks in China) for three years. I was responsible for interest rate risk management and internal funds transfer pricing. Then I joined the Restructuring Office of the bank, the twenty-member team responsible for IPO of the bank. My responsibilities include

designing financial restructuring plans and financial forecast modeling. My personal interests in risk management directed me to the MSFE program. I like swimming and traveling. I am open to everything new and learn fast.

### Chamie Townsend

I have bachelor's degrees in applied mathematics and computer engineering. During that time I had one internship with Microsoft, three internships with IBM, and two years of undergraduate mathematics teaching. Graduate studies in pure mathematics or computer engineering alone did not appeal to me. Choosing financial engineering gave me that option to integrate those disciplines with business, a thriving economy in itself. I



have become fascinated with markets and the financial impacts in every sector. I would like to pursue my doctorate in this area and later become a key financial consultant to help with issues such as transitioning from open outcry markets to electronic arcades. The most important goal throughout my educational endeavors is to keep learning to learn well. With this ability, as well as others learned from this program, I will maintain that edge in the continuously changing financial industry.

### Joe Varcelli



I attended the University of Dayton the first year of my undergraduate studies. I transferred to Kent State University in Fall of 2001 in pursuit of following my life-long dream, architecture. Similar to my freshman year at Dayton, halfway through my sophomore year I surprisingly lost all interest in architecture and was becoming increasingly frustrated because I couldn't find a major that satisfied

## **The Financial Engineering Team Report**

### **October 2004**

me. Well, during spring semester of my sophomore year I discovered a passion for finance. Later that semester, I also learned about Kent's MSFE graduate program (Master of Science in Financial Engineering) and became increasingly interested. Basically, Financial Engineering is the application of mathematical methods to the solution of risk management problems in finance. After researching what financial engineering actually entailed, I found my calling. I graduated from Kent State in May of 2005 and received my BBA in Finance and a minor in Math.

I was born in Cleveland, OH on July 11, 1981. I come from a large Italian family, so its probably no surprise that family, food, and bocce ball have significant meaning to me. Some of my other interests are traveling, reading, backpacking and weightlifting. I have always been a tough competitor and I like to challenge myself by setting high standards, so Financial Engineering is a perfect fit for me. My particular interest lies in the aspect of trading futures and derivatives.

#### **Xiaofei Sophie Zhang**

I received my Ph. D in theoretical physics from Central China Normal University in 1996 and have worked as a postdoctoral researcher in the US since 1998. I am very good in solving quantitative and analytical problems. I am interested in finding a position in quantitative analysis, risk management or financial modeling.



#### ***Marketing & Recruiting***

Rebecca Evans, the MSFE Program Administrator, has written a fifteen page report on the future direction of the MSFE marketing and recruiting efforts. This is an initial report and will be the main subject of the next program committee meeting as well as the next Advisory Board meeting. Evans surveyed the incoming Financial Engineering class in an endeavor to find out how they learned about the program and why they applied. The objective is to better market the MSFE program and receive more qualified applications.

The survey showed that the students learned about the program either through the Internet or by word of mouth. All students used the Internet to find information about our program and the other FE programs. This, combined with the fact that we have only one foreign student that received a visa to attend the program, points to a need to do more domestic recruiting. The aim will be toward US citizens or those who currently have a US visa.

There are a number of suggestions for recruiting including, advertising on Yahoo and Google, Information Sessions that are advertised in the local papers, Information Sessions held in NYC and Chicago with Advisory Board Participation, Information Sessions in Singapore (visas not an issue), informing key faculty at other universities and colleges about our program and request them to inform their students, and adding additional value to the MSFE web site. The web site is undergoing a new look and will

## **The Financial Engineering Team Report October 2004**

reflect the changes prior to our next recruiting season. The home page of the new web site will be cleaner and crisper and point to the most crucial information. One area for improvement is to have the MSFE faculty members set up a very nice personal web page including their research and course information. The template for this will be available next week and I will ask each MSFE faculty member to submit the information so I can create the web pages. Each member will have the opportunity to create this themselves or have me create it. A couple of the current students have also mentioned that they have suggestions regarding promoting the program at their undergraduate universities.

### ***MSFE Advisory Board News***

The last meeting of the Advisory Board was in New York in May 2004. Two MSFE courses were reviewed by the board and suggestions made on how to address some of the industry issues. The two courses reviewed were "Security & Investment Theory" and "Legal Aspects of Financial Engineering." A follow up report will be presented at the next meeting.

The next meeting of the MSFE Advisory Board will be in Chicago on October 26, 2004. This is prior to the FIA expo and most members will be attending. The "Fixed Income Markets" course will be reviewed at this meeting.

Advisory Board participation and promotion of this program are exceptional. They are assisting with many aspects of the MSFE Program including recruiting, certification courses, RFM support, course content reviews, networking with the students, and assisting the team with the best connections to other industry leaders as needed for any Financial Engineering issue that arises.

### ***Speaker and Training Series - Fall***

The MSFE Program Speaker and Training Series attract some of the best people in the Financial Industry from Chicago, Indiana, Ohio, and New York. One goal of the series is designed to provide the students with the most up-to-date training on the software platforms from each of the software vendors. This list has been growing each year and will be published on the MSFE web site in the near future. The speakers are selected from leading firms in the financial industry. Their years of experience and practical know-how significantly contribute to the practical aspects of the student's education and are a significant and unique part of the MSFE program at Kent State University. The speaker's presence and willingness to participate is an indication of the success of the MSFE program and its close ties to the industry.

### ***Schedule of Guest Speakers (October 2004)***

10/01/2004

Guest Speaker: Stan Yabroff

## **The Financial Engineering Team Report October 2004**

Company: CQG  
Time: 9:00A.M.-5:00P.M.  
Location: Trading Floor (MSFE Students Only)

10/08/2004

Guest Speaker: Ryan Highland  
Subject: Trading Technology Training  
Time: 9:00A.M.-4:30P.M.  
Location: Trading Floor (MSFE Students Only)

10/15/2004

Guest Speaker: Greg LaFlame  
Company: First Energy  
Time: 11:00A.M.-2:30P.M.  
Location: Trading Floor

10/21/2004

Guest Speaker: Dr. Frederick Langrher  
Subject: Marketing Seminar  
Time: 6:00P.M.-7:00P.M.  
Location: Trading Floor (MSFE Students Only)

10/22/2004

Guest Speaker: Dr. Frederick Langrher  
Subject: Marketing Seminar  
Time: 8:00A.M.-4:00P.M.  
Location: Trading Floor (MSFE Students Only)

### ***Schedule of Guest Speakers (September)***

09/10/2004

Guest Speaker: Nichole Oskin  
Company: Reuters  
Time: 12:30P.M.-6:00P.M.  
Location: Trading Floor

09/17/2004

Guest Speaker: John Donato  
Company: Donato Strategic Planning  
Time: 10:30P.M.-13:30P.M.  
Location: Trading Floor (MSFE Students Only)

09/23/2004

Guest Speaker: Mr. Todd Jones  
Company: Chicago Board of Options Exchange

# The Financial Engineering Team Report

## October 2004

Time: 12:45P.M.-13:30P.M.  
Location: Trading Floor

09/24/2004

Guest Speaker: Patrick Catania  
Company: CBOT, retired  
Time: 13:00P.M.-15:00P.M.  
Location: Trading Floor

### ***Global Derivatives Report***



Good news!

The MSFE program has received a very positive review by Global Derivatives. The link is here: <http://www.global-derivatives.com/schools/programs/kentstate-mfe.php>. They note that we are one of 4 "to watch for" programs. They also say that we will be one of the leading programs in North America in 5 to 10 years. Our only disadvantage was being located in Ohio.

Thanks for the support of everyone. It looks like things are paying off for us.

Regards,  
Mark

This is very exciting news for the program. To view the entire section on the Kent State MSFE program, read below. For the actual rankings, visit <http://www.global-derivatives.com/> and look under "Further Education".

#### **Global Derivatives - Graduate Degree Programs**

| [Discuss this program in the forums](#) |

**Kent State University - MSc Financial Engineering**  
**Kent, OH, United States**

**Program Contacts: [MSFE@kent.edu](mailto:MSFE@kent.edu) / [mholder@kent.edu](mailto:mholder@kent.edu) (Dr. Mark Holder - Prog. Director)**

The Summary: The interdisciplinary Master of Science in Financial Engineering (MSFE) degree is designed for students with strong quantitative backgrounds who have goals of becoming risk management officers, derivatives analysts or traders. The program is a demanding one and it requires the completion of 36 credit hours of coursework, including an industry-based project. It combines strong quantitative skills from mathematics, including probability theory and numerical computing, with risk management and dynamic valuation skills from finance.

**Course Structure/Topics:**

# The Financial Engineering Team Report

## October 2004

Fall - First Semester  
Derivatives I  
Financial Management I  
Topics in Probability Theory and Stochastic Processes  
Computational Finance

Spring - Second Semester  
Derivatives II  
Fixed Income Markets  
Advanced Security and Investment Theory  
Financial Mathematics  
Time Series Analysis

Summer - Third Semester  
Financial Engineering  
Legal Aspects of Financial Engineering  
Seminar: Modeling Projects

### Global Derivatives View:

One of the 4 "to watch for" programs in our rankings last year, we are still supportive of that view this year. A focused syllabus covering the all the topics we deem to be "core" for quantitative finance and additional topics highly relevant to the industry - such as legal aspects. Although not strictly a "MSc Financial Engineering" program which it claims, and probably more of a "MSc Quantitative Finance" program in our opinion - although as we readily acknowledge; is all a matter of semantics. Nonetheless, the only negative part of this program we feel is location; being based in Ohio offers little advantage for those looking for a way to practically apply course material during course time.

We would recommend this program and would be willing to say that this program will be one of the leading quantitatively oriented finance programs in North America in 5-10 years.

### Key Stats:

Acceptance Rate:

Annual Intake:

Application Deadline: Mar 1

Average Age at Entry:

Average Years of Work Experience of Class:

Dissertation/Thesis:

Duration of Program: 3 semesters

Entry Requirements:

--- A committee of faculty from the departments of Mathematics, Finance and Economics will assess a candidate's background and skills for program admission. Candidates will be evaluated based on the following:

· GRE or GMAT

## The Financial Engineering Team Report October 2004

- GPA at the undergraduate and, if available, graduate level
  - TOEFL score (For international students)
- Transcripts for all previously earned degrees
  - Letters of recommendation
- Statement of goals and objectives

GMAT: Average -

GPA: Average -

International Students:

Male-Female:

Placement Rate:

Required Courses for Completion: 36 course credits

Student-Teacher Ratio:

Tuition (04-05): \$18,201 (in state), \$27,072 (out of state)

### **Additional Information:**