Option Implied Volatility Prediction by Integrative Learning

Speaker: Henry Han
Fordham University
Date: February 28, 2018
Time: 12:00 pm – 1:00 pm
Venue: John Mulcahy Hall (JMH) 342

Abstract: With the surge of massive data in finance, implied volatility pricing remains a challenge for its essential role in trading, though few model-driven methods are available in literature. In this work, we proposed a data driven implied volatility analytics by inventing a novel integrative learning approach. The proposed method integrates different machine learning models to price implied volatility for various in-the-money options by leveraging the availability of a large amount of data in the market. The proposed approach not only demonstrates its superiority in prediction accuracy, but also a strong model independence by overcoming the generalization issue of traditional model-driven approaches.

Speaker’s Biography: Dr. Henry Han is professor of computer and information sciences at Fordham University, New York, NY USA. His research interests are in big data, data analytics, machine learning, cybersecurity, health informatics & bioinformatics. He published more than 60 papers in leading journals and top-tier conferences in these fields besides supervising nearly 40 graduate students. He was the founding director of Fordham’s MS in cybersecurity. He is senior member of IEEE.

Refreshments will be served!
Department of Computer and Information Science

Spring 2018 CIS Faculty Research Talk Series

Option Implied Volatility Prediction by Integrative Learning

Speaker: Henry Han
Fordham University
Date: February 28, 2018
Time: 12:00 pm – 1:00 pm
Venue: John Mulcahy Hall (JMH) 342

Abstract: With the surge of massive data in finance, implied volatility pricing remains a challenge for its essential role in trading, though few model-driven methods are available in literature. In this work, we proposed a data driven implied volatility analytics by inventing a novel integrative learning approach. The proposed method integrates different machine learning models to price implied volatility for various in-the-money options by leveraging the availability of a large amount of data in the market. The proposed approach not only demonstrates its superiority in prediction accuracy, but also a strong model independence by overcoming the generalization issue of traditional model-driven approaches.

Speaker’s Biography: Dr. Henry Han is professor of computer and information sciences at Fordham University, New York, NY USA. His research interests are in big data, data analytics, machine learning, cybersecurity, health informatics & bioinformatics. He published more than 60 papers in leading journals and top-tier conferences in these fields besides supervising nearly 40 graduate students. He was the founding director of Fordham’s MS in cybersecurity. He is senior member of IEEE.

Refreshments will be served!

For more information about this Spring 2018 CIS Faculty Research Talk Series, please contact Habib M. Ammari at hammari@fordham.edu
Department of Computer and Information Science

Spring 2018 CIS Faculty Research Talk Series

Option Implied Volatility Prediction by Integrative Learning

Speaker: Henry Han
Fordham University
Date: February 28, 2018
Time: 12:00 pm – 1:00 pm
Venue: John Mulcahy Hall (JMH) 342

Abstract: With the surge of massive data in finance, implied volatility pricing remains a challenge for its essential role in trading, though few model-driven methods are available in literature. In this work, we proposed a data driven implied volatility analytics by inventing a novel integrative learning approach. The proposed method integrates different machine learning models to price implied volatility for various in-the-money options by leveraging the availability of a large amount of data in the market. The proposed approach not only demonstrates its superiority in prediction accuracy, but also a strong model independence by overcoming the generalization issue of traditional model-driven approaches.

Speaker’s Biography: Dr. Henry Han is professor of computer and information sciences at Fordham University, New York, NY USA. His research interests are in big data, data analytics, machine learning, cybersecurity, health informatics & bioinformatics. He published more than 60 papers in leading journals and top-tier conferences in these fields besides supervising nearly 40 graduate students. He was the founding director of Fordham’s MS in cybersecurity. He is senior member of IEEE.

Refreshments will be served!

For more information about this Spring 2018 CIS Faculty Research Talk Series, please contact Habib M. Ammari at hammari@fordham.edu
Abstract: With the surge of massive data in finance, implied volatility pricing remains a challenge for its essential role in trading, though few model-driven methods are available in literature. In this work, we proposed a data driven implied volatility analytics by inventing a novel integrative learning approach. The proposed method integrates different machine learning models to price implied volatility for various in-the-money options by leveraging the availability of a large amount of data in the market. The proposed approach not only demonstrates its superiority in prediction accuracy, but also a strong model independence by overcoming the generalization issue of traditional model-driven approaches.

Speaker’s Biography: Dr. Henry Han is professor of computer and information sciences at Fordham University, New York, NY USA. His research interests are in big data, data analytics, machine learning, cybersecurity, health informatics & bioinformatics. He published more than 60 papers in leading journals and top-tier conferences in these fields besides supervising nearly 40 graduate students. He was the founding director of Fordham’s MS in cybersecurity. He is senior member of IEEE.

Refreshments will be served!

For more information about this Spring 2018 CIS Faculty Research Talk Series, please contact Habib M. Ammari at hammari@fordham.edu
Department of Computer and Information Science

Spring 2018 CIS Faculty Research Talk Series

Option Implied Volatility Prediction by Integrative Learning

Speaker: Henry Han
Fordham University
Date: February 28, 2018
Time: 12:00 pm – 1:00 pm
Venue: John Mulcahy Hall (JMH) 342

Abstract: With the surge of massive data in finance, implied volatility pricing remains a challenge for its essential role in trading, though few model-driven methods are available in literature. In this work, we proposed a data driven implied volatility analytics by inventing a novel integrative learning approach. The proposed method integrates different machine learning models to price implied volatility for various in-the-money options by leveraging the availability of a large amount of data in the market. The proposed approach not only demonstrates its superiority in prediction accuracy, but also a strong model independence by overcoming the generalization issue of traditional model-driven approaches.

Speaker’s Biography: Dr. Henry Han is professor of computer and information sciences at Fordham University, New York, NY USA. His research interests are in big data, data analytics, machine learning, cybersecurity, health informatics & bioinformatics. He published more than 60 papers in leading journals and top-tier conferences in these fields besides supervising nearly 40 graduate students. He was the founding director of Fordham’s MS in cybersecurity. He is senior member of IEEE.

Refreshments will be served!

For more information about this Spring 2018 CIS Faculty Research Talk Series, please contact Habib M. Ammari at hammari@fordham.edu
Abstract: With the surge of massive data in finance, implied volatility pricing remains a challenge for its essential role in trading, though few model-driven methods are available in literature. In this work, we proposed a data driven implied volatility analytics by inventing a novel integrative learning approach. The proposed method integrates different machine learning models to price implied volatility for various in-the-money options by leveraging the availability of a large amount of data in the market. The proposed approach not only demonstrates its superiority in prediction accuracy, but also a strong model independence by overcoming the generalization issue of traditional model-driven approaches.

Speaker’s Biography: Dr. Henry Han is professor of computer and information sciences at Fordham University, New York, NY USA. His research interests are in big data, data analytics, machine learning, cybersecurity, health informatics & bioinformatics. He published more than 60 papers in leading journals and top-tier conferences in these fields besides supervising nearly 40 graduate students. He was the founding director of Fordham’s MS in cybersecurity. He is senior member of IEEE.

Refreshments will be served!
Abstract: With the surge of massive data in finance, implied volatility pricing remains a challenge for its essential role in trading, though few model-driven methods are available in literature. In this work, we proposed a data driven implied volatility analytics by inventing a novel integrative learning approach. The proposed method integrates different machine learning models to price implied volatility for various in-the-money options by leveraging the availability of a large amount of data in the market. The proposed approach not only demonstrates its superiority in prediction accuracy, but also a strong model independence by overcoming the generalization issue of traditional model-driven approaches.

Speaker’s Biography: Dr. Henry Han is professor of computer and information sciences at Fordham University, New York, NY USA. His research interests are in big data, data analytics, machine learning, cybersecurity, health informatics & bioinformatics. He published more than 60 papers in leading journals and top-tier conferences in these fields besides supervising nearly 40 graduate students. He was the founding director of Fordham’s MS in cybersecurity. He is senior member of IEEE.
Abstract: With the surge of massive data in finance, implied volatility pricing remains a challenge for its essential role in trading, though few model-driven methods are available in literature. In this work, we proposed a data driven implied volatility analytics by inventing a novel integrative learning approach. The proposed method integrates different machine learning models to price implied volatility for various in-the-money options by leveraging the availability of a large amount of data in the market. The proposed approach not only demonstrates its superiority in prediction accuracy, but also a strong model independence by overcoming the generalization issue of traditional model-driven approaches.

Speaker’s Biography: Dr. Henry Han is professor of computer and information sciences at Fordham University, New York, NY USA. His research interests are in big data, data analytics, machine learning, cybersecurity, health informatics & bioinformatics. He published more than 60 papers in leading journals and top-tier conferences in these fields besides supervising nearly 40 graduate students. He was the founding director of Fordham’s MS in cybersecurity. He is senior member of IEEE.
Department of Computer and Information Science

Spring 2018 CIS Faculty Research Talk Series

Option Implied Volatility Prediction by Integrative Learning

Speaker: Henry Han
Fordham University
Date: February 28, 2018
Time: 12:00 pm – 1:00 pm
Venue: John Mulcahy Hall (JMH) 342

Abstract: With the surge of massive data in finance, implied volatility pricing remains a challenge for its essential role in trading, though few model-driven methods are available in literature. In this work, we proposed a data-driven implied volatility analytics by inventing a novel integrative learning approach. The proposed method integrates different machine learning models to price implied volatility for various in-the-money options by leveraging the availability of a large amount of data in the market. The proposed approach not only demonstrates its superiority in prediction accuracy, but also a strong model independence by overcoming the generalization issue of traditional model-driven approaches.

Speaker’s Biography: Dr. Henry Han is professor of computer and information sciences at Fordham University, New York, NY USA. His research interests are in big data, data analytics, machine learning, cybersecurity, health informatics & bioinformatics. He published more than 60 papers in leading journals and top-tier conferences in these fields besides supervising nearly 40 graduate students. He was the founding director of Fordham’s MS in cybersecurity. He is senior member of IEEE.

Refreshments will be served!

For more information about this Spring 2018 CIS Faculty Research Talk Series, please contact Habib M. Ammari at hammari@fordham.edu
Abstract: With the surge of massive data in finance, implied volatility pricing remains a challenge for its essential role in trading, though few model-driven methods are available in literature. In this work, we proposed a data driven implied volatility analytics by inventing a novel integrative learning approach. The proposed method integrates different machine learning models to price implied volatility for various in-the-money options by leveraging the availability of a large amount of data in the market. The proposed approach not only demonstrates its superiority in prediction accuracy, but also a strong model independence by overcoming the generalization issue of traditional model-driven approaches.

Speaker’s Biography: Dr. Henry Han is professor of computer and information sciences at Fordham University, New York, NY USA. His research interests are in big data, data analytics, machine learning, cybersecurity, health informatics & bioinformatics. He published more than 60 papers in leading journals and top-tier conferences in these fields besides supervising nearly 40 graduate students. He was the founding director of Fordham’s MS in cybersecurity. He is senior member of IEEE.

Refreshments will be served!
Abstract: With the surge of massive data in finance, implied volatility pricing remains a challenge for its essential role in trading, though few model-driven methods are available in literature. In this work, we proposed a data driven implied volatility analytics by inventing a novel integrative learning approach. The proposed method integrates different machine learning models to price implied volatility for various in-the-money options by leveraging the availability of a large amount of data in the market. The proposed approach not only demonstrates its superiority in prediction accuracy, but also a strong model independence by overcoming the generalization issue of traditional model-driven approaches.

Speaker’s Biography: Dr. Henry Han is professor of computer and information sciences at Fordham University, New York, NY USA. His research interests are in big data, data analytics, machine learning, cybersecurity, health informatics & bioinformatics. He published more than 60 papers in leading journals and top-tier conferences in these fields besides supervising nearly 40 graduate students. He was the founding director of Fordham’s MS in cybersecurity. He is senior member of IEEE.
Abstract: With the surge of massive data in finance, implied volatility pricing remains a challenge for its essential role in trading, though few model-driven methods are available in literature. In this work, we proposed a data driven implied volatility analytics by inventing a novel integrative learning approach. The proposed method integrates different machine learning models to price implied volatility for various in-the-money options by leveraging the availability of a large amount of data in the market. The proposed approach not only demonstrates its superiority in prediction accuracy, but also a strong model independence by overcoming the generalization issue of traditional model-driven approaches.

Speaker’s Biography: Dr. Henry Han is professor of computer and information sciences at Fordham University, New York, NY USA. His research interests are in big data, data analytics, machine learning, cybersecurity, health informatics & bioinformatics. He published more than 60 papers in leading journals and top-tier conferences in these fields besides supervising nearly 40 graduate students. He was the founding director of Fordham’s MS in cybersecurity. He is senior member of IEEE.

Refreshments will be served!
Department of Computer and Information Science

Spring 2018 CIS Faculty Research Talk Series

Option Implied Volatility Prediction by Integrative Learning

Speaker: Henry Han
Fordham University
Date: February 28, 2018
Time: 12:00 pm – 1:00 pm
Venue: John Mulcahy Hall (JMH) 342

Abstract: With the surge of massive data in finance, implied volatility pricing remains a challenge for its essential role in trading, though few model-driven methods are available in literature. In this work, we proposed a data driven implied volatility analytics by inventing a novel integrative learning approach. The proposed method integrates different machine learning models to price implied volatility for various in-the-money options by leveraging the availability of a large amount of data in the market. The proposed approach not only demonstrates its superiority in prediction accuracy, but also a strong model independence by overcoming the generalization issue of traditional model-driven approaches.

Speaker’s Biography: Dr. Henry Han is professor of computer and information sciences at Fordham University, New York, NY USA. His research interests are in big data, data analytics, machine learning, cybersecurity, health informatics & bioinformatics. He published more than 60 papers in leading journals and top-tier conferences in these fields besides supervising nearly 40 graduate students. He was the founding director of Fordham’s MS in cybersecurity. He is senior member of IEEE.

Refreshments will be served!

For more information about this Spring 2018 CIS Faculty Research Talk Series, please contact Habib M. Ammari at hammari@fordham.edu
Abstract: With the surge of massive data in finance, implied volatility pricing remains a challenge for its essential role in trading, though few model-driven methods are available in literature. In this work, we proposed a data driven implied volatility analytics by inventing a novel integrative learning approach. The proposed method integrates different machine learning models to price implied volatility for various in-the-money options by leveraging the availability of a large amount of data in the market. The proposed approach not only demonstrates its superiority in prediction accuracy, but also a strong model independence by overcoming the generalization issue of traditional model-driven approaches.

Speaker’s Biography: Dr. Henry Han is professor of computer and information sciences at Fordham University, New York, NY USA. His research interests are in big data, data analytics, machine learning, cybersecurity, health informatics & bioinformatics. He published more than 60 papers in leading journals and top-tier conferences in these fields besides supervising nearly 40 graduate students. He was the founding director of Fordham’s MS in cybersecurity. He is senior member of IEEE.

Refreshments will be served!
Option Implied Volatility Prediction by Integrative Learning

Speaker: Henry Han
Fordham University
Date: February 28, 2018
Time: 12:00 pm – 1:00 pm
Venue: John Mulcahy Hall (JMH) 342

Abstract: With the surge of massive data in finance, implied volatility pricing remains a challenge for its essential role in trading, though few model-driven methods are available in literature. In this work, we proposed a data driven implied volatility analytics by inventing a novel integrative learning approach. The proposed method integrates different machine learning models to price implied volatility for various in-the-money options by leveraging the availability of a large amount of data in the market. The proposed approach not only demonstrates its superiority in prediction accuracy, but also a strong model independence by overcoming the generalization issue of traditional model-driven approaches.

Speaker’s Biography: Dr. Henry Han is professor of computer and information sciences at Fordham University, New York, NY USA. His research interests are in big data, data analytics, machine learning, cybersecurity, health informatics & bioinformatics. He published more than 60 papers in leading journals and top-tier conferences in these fields besides supervising nearly 40 graduate students. He was the founding director of Fordham’s MS in cybersecurity. He is senior member of IEEE.

Refreshments will be served!