Conference Begins

Welcome to Niagara Falls! For those of you who have already made it into town, don’t forget about the Power Authority tour starting at 1515 today (meet in hotel lobby 1445); and the reception at the Red Coach Inn starting at 1900 (meet in hotel lobby at 1845). For more information, see “Social Events”

Conference Room

The conference will be located in the Porter-DeVeaux room of the Conference Center Niagara Falls (See “Venue” for more information)

Updated social event information

Call for Papers

CFP (pdf format)

General Chair
- Chad Heitzenrater, Air Force Research Lab, Rome NY

Program Chairs
- Jana Dittmann, Otto-von-Guericke University Magdeburg, Germany
- Scott Craver, SUNY Binghamton, USA

Local Arrangements
- Stella N. Batalama, School of Engineering and Applied Sciences University at Buffalo, The State University of New York

Program Committee
- Mauro Barni
- Patrick Bas
- Patrizio Campisi
- Scott Craver
- Jana Dittmann
We're looking forward to seeing everyone in Niagara! The social event information page has been updated with directions and itineraries. Be sure to come join us for the NY Power Authority Tour and the reception at the Red Coach Inn on Wednesday evening.

Final additions

As we enter the final week of preparations, additional conference information has been added to the website. The final invited speaker biography and abstract has been posted, times have been added to the program, and a new section detailing information on the social events is now available.

Please note that there is an informal social event before the welcome reception on Wednesday. We invite everyone to come join us on a tour of the Niagara Power Authority – see “Social Events” for more information.

Conference Information Update

Venue, Hotel and Invited Speaker information for the 13th ACM MM&SEC Workshop has been posted. Further information, including Registration, is forthcoming.

Submission deadline extended

The submission deadline has been extended to June 11, 2011.
**Submissions are Open**

Posted on 
May 1, 2011 by admin


As stated in the call for papers, templates for the ACM SIG proceedings can be found at [http://www.acm.org/sigs/publications/proceedings-templates](http://www.acm.org/sigs/publications/proceedings-templates).

Posted in [Uncategorized](#) | Comments Off

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**Call For Papers**

Posted on 
December 22, 2010 by admin

The 13th ACM Multimedia and Security Workshop will be held in Buffalo NY. The workshop’s continuing objective is to explore research in areas of multimedia data security such as data protection, media forensics, covert channels and security issues in biometrics, as well as related issues in public policy and multimedia infrastructure in real world application. Since 1998, MMSEC has fostered collaboration with researchers and developers in academia, industry and government.

**SCOPE AND PAPERS**

We welcome papers addressing any issue of secure multimedia processing, transmission or distribution, from theoretical results to deployment of secure media architectures. Demonstrations of results are encouraged. Topic include but are not limited to:

- Multimedia watermarking and fingerprinting
- Secure multimedia distribution
- Multimedia-specific authentication and encryption
- Signal processing in the encrypted domain
- Media forensics
- Steganography and steganalysis
- Biometrics
- Security evaluation and benchmarks
Emerging applications
Legal and policy issues in media security

The workshop accepts short and long papers. Short papers should be 4-6 pages long, long papers 6-10 pages. (ACM format http://www.acm.org/sigs/pubs/proceed/template.html). Accepted papers will be published in the ACM workshop proceedings.
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- Media forensics
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- Biometrics
- Security evaluation and benchmarks
- Emerging applications
- Legal and policy issues in media security
- Fusion of unconventional data sources in detection

The workshop accepts short and long papers. Short papers should be 4-6 pages long, long papers 6-10 pages. (ACM format http://www.acm.org/sigs/pubs/proceed/template.html). Accepted papers will be published in the ACM workshop proceedings.
Hotel

The ACM MM&SEC 2011 conference hotel is the Sheraton At The Falls, located adjacent to the conference venue.

Sheraton At The Falls
300 3rd Street
Niagara Falls, New York 14303

A block of 20 rooms has been set aside for this event at the price of $119/night. Additionally, a small number of rooms will be set aside at the government per diem rate for those traveling on orders. To obtain this rate, please make reservations by 30 August 2011.

Reservations can be made via phone (1-866-961-3780) or via a conference website: http://www.starwoodmeeting.com/StarGroupsWeb/res?id=1105132954&key=24CC.

This rate will apply to the two conference nights (29 & 30 September), and upon request will be made available for the period of 26 September until 3 October 2011 to accommodate those traveling abroad, or who wish to extend their travel to in order to enjoy Niagara Falls and the surrounding area.

Note: When booking, take care not to confuse the conference venue with the Sheraton On The Falls, which is on the Canadian side of the falls.

In addition to the conference hotel, many other hotels are located within walking distance of the venue.
Invited Speakers

This year, the ACM MM&SEC Workshop committee is proud to be hosting a series of invited talks on Bridging Research and Reality. These talks will come from relevant experts in the fields of Steganography/Steganalysis, Watermarking, and Multimedia Forensics and will serve to frame the discourse for related sessions within the workshop. Presentation topics will be focused on real-world lessons learned, the challenges of bringing technology to fruition, as well as applications and experiences with MM&SEC technology applications that range from commercial to law enforcement. It is our hope that these sessions will provoke and inspire attendees.

Steganography/Steganalysis Invited speaker:

Chet Hosmer – Chief Scientist & Sr. Vice President, Allen Corporation

Biography: Chet Hosmer is the Chief Scientist / Sr Vice President at Allen Corporation of America and was the Founder of WetStone Technologies, Inc. Chet has been researching and developing technologies and training surrounding steganography and watermarking for over a decade, acting as principle investigator on multiple data hiding research programs. He has made numerous appearances to discuss the threat steganography poses, including National Public Radio’s Kojo Nnamdi show, ABC’s Primetime Thursday, NHK Japan, Crime Crime TechTV and ABC News Australia. He has also been a frequent contributor to technical and news stories relating to steganography and has been interviewed and quoted by IEEE, The New York Times, The Washington Post, Government Computer News, Salon.com and Wired Magazine.

Hosmer holds a B.S. in Computer Science from the Syracuse University at Utica College. He has 12 journal publications, dozens of conference publications, and has delivered keynote and plenary talks on various cyber security related topics around the world every year.

Topic: Chet Hosmer will be presenting a talk titled “Erasing the Myth – A Case Study of Actual Steganography and Data Hiding Incidents.”

Watermarking Invited Speaker:

Tony Rodriguez – Chief Technology Officer, Digimarc

Biography: Tony Rodriguez joined Digimarc in 1996 and currently serves as Chief Technology Officer. Rodriguez has 25 years experience in computer science and image processing research and development. Over his fifteen years with Digimarc, Rodriguez has held senior software engineering and research positions, focused on the development and application of digital watermarking and other content identification technologies. Rodriguez played an integral role in the early development of solutions for identifying and tracking
digital images and later in the company’s work with an international consortium of central banks to develop a system to deter PC-based counterfeiting of banknotes. He is currently focused on the integration of content recognition technologies with machine learning strategies to create and manage context on the mobile platform in support of applications from Digimarc and its partners that enable users to identify and interact with television, audio and printed content.

Rodriguez is the inventor on 41 issued U.S. patents and 97 pending patents. He is also the author of several published papers on the topic of Digital Watermarking and a chapter in the book Multimedia Security Handbook, published in 2005. Before joining Digimarc, Rodriguez worked at the Intel Architecture Lab as a senior software engineer, focused on video segmentation and streaming technologies. Prior to that, Rodriguez held a variety of software development and engineering positions at Raytheon, Jet Propulsion Laboratory (JPL) and IBM. Rodriguez has a bachelor degree in electrical engineering from the University of Washington and an Executive MBA from Stanford.

**Topic:** Digital Watermarking exists in the space between human and machine perception and its efficacy is typically measured using application specific economic models. Commercial adoption is predicated on successfully navigating this space and maintaining a clear focus on what the customer’s definition of success is. To do so requires the integration of technologies and models from disparate fields and an acute understanding of workflow. Across a broad cross section of deployments and customers a common set of lessons have been learned and technical challenges identified. Many surround the need to accurately model and document the operational envelope of proposed algorithms and implementations. Doing so, within the economic and workflow constraints of the intended application allows early adopters to advocate for and ultimately facilitate the migration of watermarking research from labs into production. For those technologies that have successfully made the jump into the commercial sphere, there is demand to improve the algorithms and implementations, largely driven by a desire to increase the breadth of applications enabled and to support new platforms such as mobile devices. These improvements typically take the form of growing the constraint triangle (carrying capacity, robustness, imperceptibility) or are related to the underlying implementation, such as computational efficiency/gate reduction, or leveraging platform specific capabilities (GPU, etc.)

The first wave of Digital Watermarking technologies has been successfully commercialized and is now widely deployed in support of industry verticals. The next wave of applications awaiting the research community however is larger and more profound as watermarking enters into the public consciousness as an enabling technology that facilitates new user experiences with media of all types. By sharing the lessons learned and commercial challenges, as we perceive them, our hope is that we can facilitate discussion and opportunities for collaboration.

**Digital Forensics Invited Speaker:**

**Walter Bruehs, FBI Forensic Audio, Video, and Imagery Analysis Unit (FBI/FAVIAU)**

**Biography:** Walter E. Bruehs is employed by the Federal Bureau of Investigation as an Examiner of Questioned Photographic Evidence in the Forensic Audio, Video, and Image Analysis Unit. Walter has testified in both Federal and State courts. In addition to case work, Walter’s responsibilities include actively seeking out and researching emerging digital imaging technologies as they apply to the Forensic arena. He heads a program designed to identify digital cameras, based on sensor noise. He has a Master of Science degree in Electrical Engineering from the University of Maine at Orono, as well as a Bachelor of Science in Electrical Engineering from Clarkson University. Prior to working at the FBI, Walter worked as an Imaging Scientist in the research and development laboratories of the Eastman Kodak Company, where he co-authored a patent, “Method and System for Improving an Image Characteristic Based on Image Content.” In addition to his responsibilities with the FBI he has taught at forensic conferences both domestically as well as internationally and has served as an adjunct professor at Polytechnic University of NYU.

**Topic:** Bringing new technology into Federal Court. As consumer technology continues to get more sophisticated and digital in nature so then also does the need for the forensic community to develop tools to collect data from these devices. The forensic community is unique in the criteria that it must adhere to in State and Federal courts.

The characterization of a camera and its images using Photo Response Non-Uniformity was recently utilized, at the subsequent trial this analysis passed a Daubert hearing in Federal court. The Daubert criteria define the standard by which new scientific evidence can be
admitted into Federal court. This marks a 6 year process to research, develop and ultimately bring new technology into a Federal court proceeding. The project is still progressing and involved collaboration between the Federal government, academia and private industry.
## Program

### Technical program

**Day I**

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
<th>Activity</th>
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<tbody>
<tr>
<td>0800-0900</td>
<td>Registration &amp; Breakfast (Porter-DeVeaux Room)</td>
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<tr>
<td>0900-0910</td>
<td></td>
<td>Welcome</td>
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<tr>
<td>0910-1010</td>
<td></td>
<td>Walter Bruehs, FBI Forensic Audio, Video, and Imagery Analysis Unit</td>
</tr>
<tr>
<td>1010-1040</td>
<td></td>
<td>BREAK</td>
</tr>
<tr>
<td>1110-1140</td>
<td></td>
<td>Seam Carving Estimation Using Forensic Hash. <em>Wenjun Lu, Min Wu (University of Maryland, USA)</em></td>
</tr>
<tr>
<td>1140-1200</td>
<td></td>
<td>Exposing Image Forgery with Blind Noise Estimation. <em>Xunyu Pan, Xing Zhang, Siwei Lyu (SUNY Albany, USA)</em></td>
</tr>
<tr>
<td>1200-1300</td>
<td></td>
<td>LUNCH (Cataract Room)</td>
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<tr>
<td>1320-1340</td>
<td></td>
<td>Latent Fingerprint Detection using a Spectral Texture Feature. <em>Tobias Kiertscher, Robert Fischer, Claus Vielhauer (Brandenburg University of Applied Science, Germany)</em></td>
</tr>
<tr>
<td>1340-1410</td>
<td></td>
<td>Malicious fingerprint traces: a proposal for an automated analysis of printed amino acid dots using HoughCircles. <em>Mario Hildebrandt, Stefan Kiltz, Jana Dittmann (Otto-von-Guericke University, Germany), Claus Vielhauer (Brandenburg University of Applied Science, Germany)</em></td>
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<tr>
<td>1410-1440</td>
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<td>BREAK</td>
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### Biometrics

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<tr>
<th>Time</th>
<th>Event</th>
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<tbody>
<tr>
<td>1440-1510</td>
<td>Evaluation of Binary Pixel Aging Curves of Latent Fingerprint Traces for Different Surfaces Using a Chromatic White Light (CWL) Sensor. Ronny Merkel, Jana Dittmann (Otto-von-Guericke University, Germany), Claus Vielhauer (Brandenburg University of Applied Science, Germany)</td>
</tr>
<tr>
<td>1510-1540</td>
<td>Using Global Knowledge of Users' Typing Traits to Attack Keystroke Biometrics Templates. Abdul Serwadda, Vir Phoha, Ankunda Kiremire (Louisiana Tech University, USA)</td>
</tr>
<tr>
<td>1540-1610</td>
<td>Comparative Study on Fusion Strategies for Biometric Handwriting. Tobias Scheidat, Claus Vielhauer (Brandenburg University of Applied Science, Germany)</td>
</tr>
<tr>
<td>1800-2100</td>
<td>SOCIAL EVENT: Albright Knox Tour &amp; Banquet</td>
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</tbody>
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### Day II

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
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<tbody>
<tr>
<td>0800-0900</td>
<td>Registration &amp; Breakfast (Porter-DeVeaux Room)</td>
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<tr>
<td>0900-1000</td>
<td>Chet Hosmer, Chief Scientist &amp; Sr. Vice President, Allen Corporation</td>
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<tr>
<td>1000-1030</td>
<td>BREAK</td>
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### Steganography

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
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<tbody>
<tr>
<td>1030-1100</td>
<td>On Dangers of Overtraining Steganography to Incomplete Cover Model. Jessica Fridrich, Jan Kodovsky, Vojtech Holub (Binghamton University, USA)</td>
</tr>
<tr>
<td>1100-1130</td>
<td>Steganalysis of JPEG-Based Adaptive Steganography. Qingzhong Liu (Sam Houston State University, USA)</td>
</tr>
<tr>
<td>1130-1150</td>
<td>A Square-Root Law for Active Wardens. Enping Li, Scott Craver (Binghamton University, USA)</td>
</tr>
<tr>
<td>1150-1300</td>
<td>LUNCH (Cataract Room)</td>
</tr>
<tr>
<td>1300-1400</td>
<td>Tony Rodriguez, Chief Technology Officer, Digimarc</td>
</tr>
<tr>
<td>1400-1430</td>
<td>BREAK</td>
</tr>
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</table>

### Protocols

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
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<tbody>
<tr>
<td>1430-1500</td>
<td>Semi-automated communication protocol security verification for watermarking – pros and cons illustrated on a complex application scenario. Christian Kraetzer, Ronny Merkel, Robert Altschaffel, Eric Clausing, Maik Schott, Jana Dittmann (Otto-von-Guericke University, Germany)</td>
</tr>
<tr>
<td>1500-1520</td>
<td>Processing Encrypted Floating Point Signals. Martin Franz (CASED, Germany), Stefan Katzenbeisser (TU Darmstadt, Germany)</td>
</tr>
<tr>
<td>1520-1540</td>
<td>Multi-biometrics Based Crypto-biometric Session Key Generation and Sharing Protocol. Sanjay Kanade, Dijana Petrouskwa, Bernadette Dorizzi (Institut TELECOM SudParis, France)</td>
</tr>
</tbody>
</table>

### Applications

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
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<tbody>
<tr>
<td>1540-1600</td>
<td>Contextualizing Security for Digital Long-term Preservation. Kun Qian, Maik Schott, Christian Kraetzer (Otto-von-Guericke University, Germany)</td>
</tr>
</tbody>
</table>

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| 1600-1630 | Building Multimedia Security Applications in the MPEG Reconfigurable Video Coding (RVC) Framework. Junaid Jameel Ahmad, Shujun Li (University of Konstanz, Germany), Ihab Amer (German University in Cairo, Egypt), Marco Mattavelli (EPFL, Switzerland) |
Registration

Registration is now online. The registration fees are:

<table>
<thead>
<tr>
<th></th>
<th>Before August 31</th>
<th>After August 31</th>
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</thead>
<tbody>
<tr>
<td>ACM/SIG member</td>
<td>$450.00</td>
<td>ACM/SIG member</td>
</tr>
<tr>
<td>Non-member</td>
<td>$500.00</td>
<td>Non-member</td>
</tr>
<tr>
<td>Student</td>
<td>$350.00</td>
<td>Student</td>
</tr>
</tbody>
</table>

IMPORTANT NOTE: Each presented paper must have an author registered at a non-student rate.

The registration site can be found at

http://www.regonline.com/acmmultimediasecurityworkshop
Social Events

Attendees to this year's MM&Sec will have the opportunity to participate in a number of social events which highlight the Niagara/Buffalo area.

Wednesday, 28 September 2011

Power authority tour, 1515-1615: Everyone (attendees and guests) is invited on a tour of the Niagara Power Authority. Attendees can make their own way to the location, or meet up with the group in the hotel lobby at 1445 (A-1 Taxi is approximately $5/per person round trip). Driving directions.

Cocktail Reception at the Red Coach Inn, 1900-2100: Please join us at the Red Coach Inn overlooking the Niagara Rapids for wine and appetizers. Walking directions, More on the Red Coach Inn.

<table>
<thead>
<tr>
<th>Time</th>
<th>Event Description</th>
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<tbody>
<tr>
<td>14:45-15:00</td>
<td>Meet at the Sheraton at the Falls Hotel</td>
</tr>
<tr>
<td>15:00-15:15</td>
<td>Depart to New York Power Authority</td>
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<tr>
<td>15:15-16:15</td>
<td>New York Power Authority Tour</td>
</tr>
<tr>
<td>16:15-16:30</td>
<td>Return to the Sheraton at the Falls Hotel</td>
</tr>
<tr>
<td>18:45-19:00</td>
<td>Depart for Red Coach Inn (short walk)</td>
</tr>
<tr>
<td>19:00-21:00</td>
<td>Reception (cocktails and hors d'oeuvres) Red Coach Inn, Niagara Falls</td>
</tr>
<tr>
<td>21:00-21:15</td>
<td>Return to hotel</td>
</tr>
</tbody>
</table>

Thursday, 29 September 2011

Social Dinner and tour of the Albright-Knox Art Gallery, 1800-2200: Attendees will be picked up by bus and transported to the Albright-Knox Art Gallery in downtown Buffalo where we will enjoy a private tour of the gallery, followed by a three course dinner. More on Albright-Knox.

<table>
<thead>
<tr>
<th>Time</th>
<th>Event Description</th>
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<tbody>
<tr>
<td>16:30-16:45</td>
<td>Meet at the Sheraton at the Falls Hotel</td>
</tr>
<tr>
<td>16:45-17:00</td>
<td>Depart for Albright Knox Art Gallery, Buffalo (Bus will be provided.)</td>
</tr>
<tr>
<td>17:00-17:45</td>
<td>Travel to Albright Knox Art Gallery</td>
</tr>
<tr>
<td>17:45-18:00</td>
<td>Arrive at Albright Knox Art Gallery</td>
</tr>
<tr>
<td>Time</td>
<td>Event</td>
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<tr>
<td>----------</td>
<td>--------------------------------------------</td>
</tr>
<tr>
<td>18:00-18:45</td>
<td>Albright Knox Art Gallery Tour</td>
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<tr>
<td>19:00-21:30</td>
<td>Dinner, Albright Knox Café</td>
</tr>
<tr>
<td>21:30-22:00</td>
<td>Return to Sheraton at the Falls Hotel</td>
</tr>
</tbody>
</table>

The 13th ACM Workshop on Multimedia and Security

Proudly powered by WordPress.
Submission

You can log in to the CMT submissions system to upload your paper at https://cmt.research.microsoft.com/MMSEC2011/Default.aspx.

As stated in the call for papers, templates for the ACM SIG proceedings can be found at http://www.acm.org/sigs/publications/proceedings-templates.
Venue

UPDATE: The MM&SEC sessions will be held in the Porter-DeVeaux room of the conference center. If entering from the main entrance Old Falls Street (between the Sheraton and the Conference Center), turn left and continue until you pass through the double doors. The registration desk will be straight ahead, and the Porter-DeVeaux room will be to the right.

This year’s MM&SEC conference will be held at The Conference Center Niagara Falls (www.conferencecenterniagarafalls.com), in downtown Niagara Falls NY (USA) and just steps away from the scenic Niagara Falls.

Directions (from the venue website)

From Buffalo-Niagara International Airport (BUF):
1. Turn Slight left onto NY-33 W.
2. Merge onto I-90 E/New York State Trwy E toward I-290/Niagara Falls/Albany.
3. Merge onto I-290 w/Youngman Exwy via exit number 50 toward Niagara Falls.
4. Merge onto New York State Trwy/I-190 N toward Niagara Falls (Portions Tolls).
5. Take the R. Moses Pkwy exit- exit number 21 toward Niagara Reservation/State Park.
6. Merge onto Robert Moses State Pkwy N.
7. Take exit City Traffic.
8. At the 2nd light make a left onto Rainbow Blvd.
9. Turn Right onto Third St.
(Old Falls Street is a pedestrian walk on the left hand side, adjacent to the Intercontinental Hotel.)

Total Est. Time: 28 minutes
Total Est. Distance: 24.62 miles

FROM BUFFALO:

Take the I-190 North towards Niagara Falls
Merge onto the Robert Moses Parkway North Exit – Exit #21
Stay in the right hand lane on the Robert Moses Parkway and exit towards “city traffic”
At the second traffic light, turn left onto Rainbow Blvd
Turn right onto Third Street