

## Curriculum Vitae Sabirat Rubya

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### Positions/Employment

2021-present	Marquette University, Milwaukee, Wisconsin Assistant Professor, Department of Computer Science
2015-2020	University of Minnesota, Twin Cities, Minneapolis, Minnesota Graduate Research and Teaching Assistant
2019 (Jan-May)	Macalester College Saint Paul, Minnesota Visiting Instructor, Department of Mathematics, Statistics, and Computer Science
2014	Bangladesh University of Engineering and Technology Part-time Faculty, Department of Computer Science and Engineering
2012-2015	United International university, Dhaka, Bangladesh Lecturer, Department of Computer Science
2012	Prolog Inc., Dhaka, Bangladesh Android Application Developer

### Education

2020	University of Minnesota, Twin Cities PhD in Computer Science Thesis: Enhancing Access to Peer Support for Recovery from Substance Use Disorders Adviser: Svetlana Yarosh Committee: Loren Terveen, Jaideep Srivastava, Brenna Greenfield
2012	Bangladesh University of Engineering and Technology B.Sc. in Computer Science

### Research Interest

- Human-Computer Interaction
- Social Computing
- Health Informatics
- Human-aided Machine Learning

### Publications

#### Journal Articles:

[J2] "Interpretations of Online Anonymity in Alcoholics Anonymous and Narcotics Anonymous"  
**Sabirat Rubya** and Svetlana Yarosh. PACM on Human-Computer Interaction, Vol. 1, No. 2, Article 91.  
Publication date: November 2017.

[J1] "Genetic Approach for a Flexible Cell Phone Keypad with Reduced Keystrokes and Key Jamming for Better Human Technology Interaction"  
**Sabirat Rubya**, Samiul Monir, and Hasan Shahid Ferdous. The Journal of Multimedia (Academy Publishers), 2012, Vol. 7, No. 5, pp 341-352.

#### Conference Publications:

[C7] “Comparing Generic and Community-Situated Crowdsourcing for Data Validation in the Context of Recovery from Substance Use Disorders”

Sabirat Rubya, Joseph Numainville, and Svetlana Yarosh. To appear in Proceedings of the 2021 ACM Conference on Human Factors in Computing Systems (CHI 2021).

[C6] “Bridging Qualitative and Quantitative Methods for User Modeling: Tracing Cancer Patient Behavior in an Online Health Community”

Zachary Levonian, Drew Richard Erikson, Wenqi Luo, Saumik Narayanan, **Sabirat Rubya**, Prateek Vachher, Loren Terveen, and Svetlana Yarosh. In Proceedings of the 14th International AAAI Conference on Web and Social Media – ICWSM 2020.

[C5] “HAIR: Towards Developing a Global Self-Updating Peer Support Group Meeting List using Human-Aided Information Retrieval”

**Sabirat Rubya**, Xizi Wang, and Svetlana Yarosh. Accepted in the SIGIR Conference on Human Information Interaction and Retrieval (CHIIR 2019) [Acceptance Rate: 33.3%]

[C4] “Video-Mediated Peer Support in an Online Community for Recovery from Substance Use Disorders”

**Sabirat Rubya** and Svetlana Yarosh. In proceedings the 20th ACM Conference on Computer-Supported Cooperative Work and Social Computing (CSCW 2017) [Acceptance Rate: 34.5%]

[C3] “Rotation and Scale Invariant Posture Recognition using Microsoft Kinect Skeletal Tracking Feature”

Samiul Monir, **Sabirat Rubya**, Hasan Shahid Ferdous, in proceedings of the 12th International Conference on Intelligent Systems Design and Applications (ISDA- 2012).

[C2] “SS-ADC: Scatter Search with Adaptive Diversity Control”

**Sabirat Rubya**, Samiul Monir, Mahfuza Sharmin, Mohammad S. Alam, Mohammad S. Rahman. In proceedings of the 7th International Conference on Electrical and Computer Engineering (ICECE- 2012).

[C1] “A Flexible Keypad Reducing Keystrokes and Key Jamming for Cell Phones”

**Sabirat Rubya**, Samiul Monir, Hasan Shahid Ferdous. In proceedings of the International Conference on Computer and Information Technology (ICCIT- 2011).

#### **Others (Workshop papers, Posters, Demos, etc.):**

[W6] “Conducting Research with People in Recovery from Substance Use Disorders”

**Sabirat Rubya**. CSCW 2018 Workshop on Conducting Research with Stigmatized Populations

[W5] “Risk "attention" or "adventure": A Qualitative Study of Novelty and Familiarity in Music Listening”

Vikas Kumar, **Sabirat Rubya**, Joseph Konstan, and Loren Terveen. Joint Workshop on Interfaces and Human Decision Making for Recommender Systems, IntRS @RecSys 2018

[W4] “Facilitating Peer Support for Recovery from Substance Use Disorders”

**Sabirat Rubya**. **1<sup>st</sup> place** in Student Research Competition in Graduate category, Extended Abstracts on Human Factors in Computing Systems (CHI EA '17). [Acceptance Rate: 20%]

[W3] “ShareTable Application for HP Sprout”

Baris Unver, Sarah A. McRoberts, **Sabirat Rubya**, Haiwei Ma, Zuoyi Zhang, and Svetlana Yarosh. In Proceedings of the 2016 CHI Conference Extended Abstracts on Human Factors in Computing Systems (CHI EA '16). [Acceptance Rate: 20%]

[W2] “Design Implication for a Customized Smartphone File Explorer from User Feedback”

**Sabirat Rubya** and Syed Ishtiaque Ahmed. In Proceedings of the 4th Annual Symposium on Computing for Development (ACM DEV, 2013). [Acceptance Rate: 33%]

[W1] “Parent-child Facebook Friendship: an Actuator for Generation Gap”

Samiul Monir, **Sabirat Rubya**, Hasan Shahid Ferdous. In Proceedings of the Workshop on Human and Technology (WHAT), co-located with the 16th International Conference on Computer and Information Technology (ICCIT-2013).

## **Teaching Experience**

### **Marquette University**

COSC 3250: Operating Systems

Spring 2021: 71 students

### **Macalester College**

COMP 124: Object-Oriented Programming and Data Structures in Java

Spring 2019: 16 students

### **United International University**

CSI 121: Structured Programming Language

Fall 2012-Spring 2015: total 400 students

CSI 122: Structured Programming Language Laboratory

Fall 2012-Spring 2015: total 400 students

CSI 113: Electric Circuits

Fall 2012: 38 students

CSI 217: Data Structures

Fall 2012, Fall 2013, Fall 2014-Summer 2015: total 195 students

CSI 218: Data Structures Laboratory

Fall 2012, Fall 2013, Fall 2014-Summer 2015: total 195 students

CSI 309: Operating System Concepts

Summer 2012-Spring 2015: total 480 students

CSI 310: Operating System Concepts Laboratory

Summer 2012-Spring 2015: total 480 students

CSI 481: Mobile Application Development

Spring 2015: 29 students

### **Bangladesh University of Engineering and Technology**

Operating Systems Laboratory

Fall 2014: 30 students

Compiler Laboratory

Fall 2014: 30 students

Technical Writing

Fall 2014: 30 students

Information Systems Design Laboratory

Fall 2014: 30 students

**Curriculum Development:** While a lecturer at the United International University, I collaborated with another colleague to design and develop the course curriculum for “Mobile Application Development”. I taught this course during Spring 2015.

## **Teaching Assistantships**

### **University of Minnesota**

CSCI 5115: User Interface Design, Implementation, and Evaluation (Spring 2020, Fall 2019, Fall 2015)

CSCI 5117: Developing the Interactive Web (Fall 2017)

## **Advising and Mentoring**

### **PhD students:**

Md. Romael Haque

Farhat Tasnim Progga

### **Undergraduate students:**

#### **Marquette University**

Sydney Shearer (Summer 2021)

#### **University of Minnesota**

Joseph Numainville (2018-2020)

Sahana Iyer (2020)

Timilehin Adeniyi (2018-2019)

Tab Zhang (2017-2018)

Xizi (Lucy) Wang (2016-2017)

Thomas Crumrine (2016-2017)

Hannah Weissman (2016)

## **Awards, Honors, Grants**

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|------------|--|
| 2019       | STEM Faculty Launch Workshop from Worcester Polytechnic Institute (full funding)                                     |
| 2018       | SIGIR Student Travel Grant for attending and presenting paper in CHIIR 2019 in Glasgow, Scotland                     |
| 2018       | University of Minnesota Computer Science Departmental Grant to attend CRA-W Workshop                                 |
| 2017       | 1 <sup>st</sup> Place, SIGCHI Student Research Competition (CHI 2017, Graduate Category)                             |
| 2016       | University of Minnesota Computer Science Departmental Grant to attend Grace Hopper Celebration of Women in Computing |
| 2015       | University of Minnesota College of Science and Engineering Graduate Fellowship                                       |
| 2012       | CodeCrafters-Investortools Research Travel Grant for attending and presenting paper in ISDA 2012                     |
| 2009, 2011 | Dean’s List Scholarship of Bangladesh University of Engg. & Tech.  |

## **Invited Presentations**

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|----------|--|
| Apr 2021 | Department Colloquium of Electrical and Computer Engineering, Marquette University   |
| Feb 2020 | Department of Computer Science, Berea College, “Human-in-the-loop Machine Learning in the Context of Recovery from Substance Use Disorders.” |
| Feb 2020 | Department of Computer Science, Columbia University, “Facilitating peer support for recovery from substance use disorders.”                  |

- Feb 2020 Ramapo College of New Jersey, "Designing Technology for People in Recovery from Substance Use Disorders."
- Jan 2020 Department Colloquium of Marquette University Computer Science Department, "Facilitating Access to Peer Support through Technology for Recovery from Substance Use Disorders."
- July 2015 Mentoring Experience for National Mobile Application Awareness & Capacity Building Program in Dhaka, Bangladesh

**Guest Lectures**

- 2016 University of Minnesota, Course lecture for CSCI 5115, "Native & Hybrid Android App Development"

**Other Presentations**

- Dec 2020 Three-minute Thesis Competition, College of Science and Engineering, University of Minnesota, "Human-Machine Team can Save Lives!"
- Nov 2019 Research Showcase, University of Minnesota Computer Science & Engineering 50th Anniversary Celebration, "Health Peer Support"
- Nov 2015 Open House, Department of Computer Science, University of Minnesota, "Understanding Online Recovery from Substance Abuse Disorders."

**Service**

**Program committee:** CHI 2022 papers, CHI 2021 Late-breaking work, CSCW 2021 posters

**External reviewer:** ICWSM 2021, CSCW 2018-2021, IUI 2020-2021, CHI 2019-2020, Transactions on Social Computing (May 2019), CHI 2018 LBW, PACM on HCI (November 2017), SKIMA 2014 (December 2014)

**Session chair:** CHI 2021

**Webmaster:**

grouplens.org (September 2018-August 2019)

hcic.org (2017-present)

SIGCHI Executive Committee Volunteer (September 2016-August 2018)

Student Volunteer: CSCW 2020, CHI 2018, CHI 2016, Grace Hopper Celebration of Women in Computing 2016 Secretary, Bangladeshi Student Association, University of Minnesota (Sept 2017-August 2018)

Jury Board Member, EATL-Prothom Alo Mobile Apps Contest 2014 (February 2014)

Mentor, National Mobile Application Awareness & Capacity Building Program (August 2013)

Mentor, UIU Intra-department Project Show (August 2014)