# CURRICULUM VITAE

### @First @Middle @Last

### Computer Science

@FromDate - @ToDate

14 MacLean Hall phone: (319) 335-XXXX
The University of Iowa email: XXXXQuiowa.edu

Iowa City, Iowa 52242 web: http://www.cs.uiowa.edu/~XXXX

# EDUCATION AND PROFESSIONAL HISTORY

### **Post Graduate Education**

@Year - @Year @LevelOrPosition, @FieldOfStudy, @Institution

Mentor(s): @Mentors

Mentor(s): @Mentors

### **Higher Education**

@Year Phd, @FieldOfStudyOrMajor, @HonorsAndDistinctions, @Institution

Thesis: @Title

@Year M.S., @FieldOfStudyOrMajor, @HonorsAndDistinctions, @Institution

Thesis: @Title

 $@Year \quad \textbf{BS}, \, @FieldOfStudyOrMajor, \, @HonorsAndDistinctions, \, @Institution \\$ 

Thesis: @Title

#### Professional and Academic Positions

@Year - present @PositionOrTitleOrRank, Department of Computer Science, The University

of Iowa[. @Annotation]

@Annotation]

@Annotation]

#### **Licensures and Certifications**

@Year @TitleOfLicensureOrCertification, @SponsoringOrganization[. @Annotation] @Year @TitleOfLicensureOrCertification, @SponsoringOrganization[. @Annotation]

### Honors and Awards

### Memberships

@Year - present@OrganizationName@Year - @Year@OrganizationName

# TEACHING

### Courses Taught at the University of Iowa

| Term       | Course #           | Title       | Ten-day<br>Enroll. | Final<br>Enroll. |
|------------|--------------------|-------------|--------------------|------------------|
| @Sem @Year | @Prefix:@Num:@Sect | @CourseName | @Number            | @Number          |
| @Sem @Year | @Prefix:@Num:@Sect | @CourseName | @Number            | @Number          |

### Additional Courses Taught (not on MAUI)

| Term       | Course #           | Title       | Ten-day<br>Enroll. | Final<br>Enroll. |
|------------|--------------------|-------------|--------------------|------------------|
| @Sem @Year | @Prefix:@Num:@Sect | @CourseName | @Number            | @Number          |
| @Sem @Year | @Prefix:@Num:@Sect | @CourseName | @Number            | @Number          |

### Innovations in Teaching

#### Design & Implementation of New Courses

### **Extramural Teaching Activities**

@Month @Year - @Month @Year - @Title[, @Annotation] @Month @Year - @Month @Year - @Title[, @Annotation]

### **Intramural Teaching Activities**

### Revisions in Existing Courses

### @TypeOfContribution

### Student Mentoring Summary

### Student Mentoring

#### MCS — Advisor

### PhD — Advisor

#### PhD — Committee Chair

### PhD — Committee Member

@Month @Year - @Month @Year \ \text{ \mathbb{Q}Title}, \ \text{QLastName}, \ \text{@FirstName}; \ \text{@StageOfDegreeCompletion}[, \ \text{@Annotation}] \ \text{@Month @Year - @Month @Year \ \text{\mathbb{Q}Title} \ \text{@LastName} \ \text{@FirstName} \ \text{@StageOfDegreeCompletion}[ \]

@Annotation]

@Annotation]

### @DegreeObjective — @InvolvementType

### **Professional Mentoring**

#### Postdoctoral Researcher

@Month @Year - @Month @Year

@LastName, @FirstName; @ProgramName, @Department, @Institution, @MentoringActivityDescription

@Month @Year - @Month @Year

@LastName, @FirstName; @ProgramName, @Department, @Institution, @MentoringActivityDescription

@Month @Year - @Month @Year

@LastName, @FirstName; @ProgramName, @Department, @Institution, @MentoringActivityDescription

### Research Scientist

#### **Assistant Professor**

### @MenteeLevel

@Month @Year - @Month @Year

tion, @MentoringActivityDescription

@Month @Year - @Month @Year

@LastName, @FirstName; @ProgramName, @Department, @Institution, @MentoringActivityDescription

@LastName, @FirstName; @ProgramName, @Department, @Institu-

# SCHOLARSHIP

CLAS \* System: \*= major contribution \*\*\*= equal contribution \*\*\*= equal contribution \*\*\*\*= minor contribution

#### **Publications**

#### Refereed Articles

[1] \*\*\* A. Reynolds, H. Barbosa, D. Larraz, and C. Tinelli, "Scalable algorithms for abduction via enumerative syntax-guided synthesis," in *Automated Reasoning - 10th International Joint Conference, IJCAR 2020, Paris, France, July 1-4, 2020, Proceedings, Part I*, N. Peltier and V. Sofronie-Stokkermans, Eds., ser. Lecture Notes in Computer Science, vol. 12166, Springer, 2020, pp. 141–160. DOI: 10.1007/978-3-030-51074-9\_9.

- [2] \*\*\* M. Brain, A. Niemetz, M. Preiner, A. Reynolds, C. W. Barrett, and C. Tinelli, "Invertibility conditions for floating-point formulas," in *Proceedings of the 31st International Conference on Computer Aided Verification (CAV 2019)*, I. Dillig and S. Tasiran, Eds., ser. Lecture Notes in Computer Science, vol. 11562, Springer, 2019, pp. 116–136. DOI: 10.1007/978-3-030-25543-5\_8.
- [3] \*\*\* K. Bansal, C. Barrett, A. Reynolds, and C. Tinelli, "Reasoning with finite sets and cardinality constraints in SMT," *Logical Methods in Computer Science*, vol. 14, no. 4, 2018. DOI: 10.23638/LMCS-14(4:12)2018.
- [4] \*\*\* T. Liang, A. Reynolds, N. Tsiskaridze, C. Tinelli, C. Barrett, and M. Deters, "Constraint solving for finite model finding in SMT solvers," *Theory and Practice of Logic Programming*, vol. 17, no. 4, pp. 516–558, Jul. 2017, (Invited submission).

#### Non-Refereed Articles

- [1] \*\*\* A. Biere, C. Tinelli, and C. Weidenbach, "Preface to the special issue on automated reasoning systems," J. Autom. Reason., vol. 64, no. 3, pp. 361–362, 2020. DOI: 10.1007/s10817-019-09531-1.
- [2] \*\*\* J. H. Davenport, M. England, A. Griggio, T. Sturm, and C. Tinelli, "Symbolic computation and satisfiability checking," J. Symb. Comput., vol. 100, pp. 1–10, 2020. DOI: 10.1016/j.jsc.2019.07.017.
- \*\*\* J. C. Blanchette, C. Fuhs, V. Sofronie-Stokkermans, and C. Tinelli, "Deduction beyond first-order logic (Dagstuhl Seminar 17371)," *Dagstuhl Reports*, vol. 7, no. 9, pp. 26–46, 2017. DOI: 10.4230/DagRep. 7.9.26.

### **Books**

[1] \*\*\* M. Abramowitz and I. A. Stegun, *Handbook of Mathematical Functions with Formulas, Graphs, and Mathematical Tables*, ninth Dover printing, tenth GPO printing. New York City: Dover, 1964.

#### **Edited Volumes**

- [1] \*\*\* C. Baier and C. Tinelli, Eds., Tools and Algorithms for the Construction and Analysis of Systems 21st International Conference, TACAS 2015, Held as Part of the European Joint Conferences on Theory and Practice of Software, ETAPS 2015, London, UK, April 11-18, 2015. Proceedings, vol. 9035, Lecture Notes in Computer Science, Springer, 2015, ISBN: 978-3-662-46680-3. DOI: 10.1007/978-3-662-46681-0.
- \*\*\* C. Tinelli and V. Sofronie-Stokkermans, Eds., Frontiers of Combining Systems, 8th International Symposium, FroCoS 2011, Saarbrücken, Germany, October 5-7, 2011. Proceedings, vol. 6989, Lecture Notes in Computer Science, Springer, 2011, ISBN: 978-3-642-24363-9. DOI: 10.1007/978-3-642-24364-6.

### Refereed Book Chapters

\*\*\* C. W. Barrett and C. Tinelli, "Satisfiability modulo theories," in *Handbook of Model Checking*,
 E. M. Clarke, T. A. Henzinger, H. Veith, and R. Bloem, Eds., (Invited contribution), Springer, 2018,
 pp. 305-343. DOI: 10.1007/978-3-319-10575-8\_11.

### **Book Chapters**

- [1] \*\*\* C. Lutz, U. Sattler, C. Tinelli, A. Turhan, and F. Wolter, "A tour of Franz Baader's contributions to knowledge representation and automated deduction," in *Description Logic, Theory Combination, and All That Essays Dedicated to Franz Baader on the Occasion of His 60th Birthday*, ser. Lecture Notes in Computer Science, C. Lutz, U. Sattler, C. Tinelli, A. Turhan, and F. Wolter, Eds., vol. 11560, Springer, 2019, pp. 1–14. DOI: 10.1007/978-3-030-22102-7\_1.
- [2] \*\*\* C. W. Barrett, R. Sebastiani, S. A. Seshia, and C. Tinelli, "Satisfiability modulo theories," in *Handbook of Satisfiability*, ser. Frontiers in Artificial Intelligence and Applications, A. Biere, M. Heule, H. van Maaren, and T. Walsh, Eds., vol. 185, (Invited contribution), IOS Press, 2009, pp. 825–885. DOI: 10.3233/978-1-58603-929-5-825.

#### **Electronic Publications**

- [1] \*\*\*\* M. Mann, A. Wilson, C. Tinelli, and C. W. Barrett, "Smt-switch: A solver-agnostic C++ API for SMT solving," *CoRR*, vol. abs/2007.01374, 2020. arXiv: 2007.01374. [Online]. Available: https://arxiv.org/abs/2007.01374.
- [2] \*\*\* A. Stump, G. Sutcliffe, and C. Tinelli, Eds., Workshop on Evaluation Methods for Solvers, and Quality Metrics for Solutions, EMSQMS 2010, Edinburgh, UK, July 20, 2010, vol. 6, EPiC Series in Computing, EasyChair, 2012. [Online]. Available: https://easychair.org/publications/volume/EMSQMS\_2010.

#### **Technical Reports**

- [1] \*\*\* T. Liang, N. Tsiskaridze, A. Reynolds, C. Tinelli, and C. Barrett, "A decision procedure for regular membership and length constraints over unbounded strings," Department of Computer Science, University of Iowa, Tech. Rep., 2015. [Online]. Available: https://homepage.cs.uiowa.edu/~tinelli/papers/LiaEtAl-RR-15.pdf.
- [2] \*\*\* P. Baumgartner and C. Tinelli, "Model evolution with equality modulo built-in theories," NICTA, Tech. Rep., 2011. [Online]. Available: https://homepage.cs.uiowa.edu/~tinelli/papers/BauTin-RR-11.pdf.

#### Abstracts

[1] \* C. Tinelli, This is an abstract abstract, 2020.

### Reviews

[1] \* C. Tinelli, Review of "This is an abstract abstract", 2020.

### **@OtherContributionType** [as above]

#### Performances and Exhibits

@Month @Year @Title — @Role. Event held at @Venue @City, @State. Sponsored by @Sponsor.

Commissioned by @Agency. In collaboration with @CollaboratorList. Further

details at @WebAddress

@Month @Year @Title — @Role. Event held at @Venue @City, @State. Sponsored by @Sponsor.

Commissioned by @Agency. In collaboration with @CollaboratorList. Further

details at @WebAddress

### **Inventions and Patents**

1. @InventorList. @Number, @Title. @Annotation

2. @InventorList. @Number, @Title. @Annotation

### Software

```
    @Year - @Year
    @SoftwareName, @BriefDescription, @URL
    @Year - @Year
    @SoftwareName, @BriefDescription, @URL
```

### Areas of Research Interest

@Area

@Area

@Area

### **Grants and Contracts**

#### Submitted

@From - @To @Title @ContractOrGrantNumber

Funded by @AwardingOrganization. Award amount: (\$@TotalAmountAwarded). Percent effort: PercentOfEffortOrNumberOfMonths. Investigator(s): @InvestigatorAndRoleList. Iowa portion: \$@AmountAwarded-ToIowa.

Tolov

@From - @To @Title @ContractOrGrantNumber

Funded by @AwardingOrganization. Award amount: (\$@TotalAmountAwarded). Percent effort: PercentOfEffortOrNumberOfMonths. Investigator(s): @InvestigatorAndRoleList. Iowa portion: \$@AmountAwarded-ToIowa.

### Current

@From - @To @Title @ContractOrGrantNumber

Funded by @AwardingOrganization. Award amount: (\$@TotalAmountAwarded). Percent effort: PercentOfEffortOrNumberOfMonths. Investigator(s): @InvestigatorAndRoleList. Iowa portion: \$@AmountAwarded-ToIowa.

@From - @To @Title @ContractOrGrantNumber

Funded by @AwardingOrganization. Award amount: (\$@TotalAmountAwarded). Percent effort: PercentOfEffortOrNumberOfMonths. Investigator(s): @InvestigatorAndRoleList. Iowa portion: \$@AmountAwarded-ToIowa.

### Completed

@From - @To @Title @ContractOrGrantNumber

Funded by @AwardingOrganization. Award amount: (\$@TotalAmountAwarded). Percent effort: PercentOfEffortOrNumberOfMonths. Investigator(s): @InvestigatorAndRoleList. Iowa portion: \$@AmountAwarded-ToIowa.

@From - @To @Title @ContractOrGrantNumber

Funded by @AwardingOrganization. Award amount: (\$@TotalAmountAwarded). Percent effort: PercentOfEffortOrNumberOfMonths. Investigator(s): @InvestigatorAndRoleList. Iowa portion: \$@AmountAwarded-ToIowa.

#### Unfunded

@SubmisDate @Title @ContractOrGrantNumber

Submitted to @AwardingOrganization. Award amount: (\$@TotalAmountAwarded). Percent effort: PercentOfEffortOrNumberOfMonths. Investigator(s): @InvestigatorAndRoleList. Iowa portion: \$@AmountAwarded-ToIowa.

@SubmisDate @Title @ContractOrGrantNumber

Submitted to @AwardingOrganization. Award amount: (\$@TotalAmountAwarded). Percent effort: PercentOfEffortOrNumberOfMonths. Investigator(s): @InvestigatorAndRoleList. Iowa portion: \$@AmountAwarded-ToIowa.

### **Invited Lectures and Conference Presentations**

### National — Colloquia

### National — Invited Lectures

| @Month @Year    | $[@ConferenceOrMeetingName,]\\ @State$   | @Presentation Title, | [@HostingOrg,]  | @City,  |
|-----------------|--|----------------------|-----------------|---------|
| @Month @Year    | $[@ConferenceOrMeetingName,]\\ @State$   | @Presentation Title, | [@HostingOrg,]  | @City,  |
| National — Con  | ference Presentations  |                      |                 |         |
| @Month @Year    | @ConferenceName, @Presentati<br>Presenters/Authors: @AuthorLi<br>Student Presenters/Authors: @Authors: | ist.                 | ate,] @Country. |         |
| @Month @Year    | @ConferenceName, @Presentati<br>Presenters/Authors: @AuthorLi<br>Student Presenters/Authors: @Authors: @Authors:   | ist.                 | te,] @Country.  |         |
| International — | Keynote Talks  |                      |                 |         |
| @Month @Year    | $[@ConferenceOrMeetingName,]\\ @State$   | @Presentation Title, | [@HostingOrg,]  | @City,  |
| @Month @Year    | $[@ConferenceOrMeetingName,]\\ @State$   | @Presentation Title, | [@HostingOrg,]  | @City,  |
| International — | Invited Talks  |                      |                 |         |
| @Month @Year    | $[@ConferenceOrMeetingName,]\\ @State$   | @Presentation Title, | [@HostingOrg,]  | @City,  |
| @Month @Year    | $[@ConferenceOrMeetingName,]\\ @State$   | @Presentation Title, | [@HostingOrg,]  | @City,  |
| International — | Invited Lectures and Tutoria   | als                  |                 |         |
| @Month @Year    | $[@ConferenceOrMeetingName,]\\ @State$   | @Presentation Title, | [@HostingOrg,]  | @City,  |
| @Month @Year    | $[@ConferenceOrMeetingName,]\\ @State$   | @Presentation Title, | [@HostingOrg,]  | @City,  |
| @Scope — @Pre   | esentation Type  |                      |                 |         |
| @Month @Year    | [@ConferenceOrMeetingName,]<br>@State] [, @Country]  | @Presentation Title, | [@HostingOrg,]  | @City[, |
| @Month @Year    | [@ConferenceOrMeetingName,]<br>@State] [, @Country]  | @Presentation Title, | [@HostingOrg,]  | @City[, |
|                 |  |                      |                 |         |

# SERVICE

# Profession

### Editor-in-chief

#### **Associate Editor**

```
@Year - @Year @PublicationName[, @Annotation]
@Year - @Year @PublicationName[, @Annotation]
```

### Trustee

```
@Year - @Year @OrganizationName[, @Annotation]
@Year - @Year @OrganizationName[, @Annotation]
```

### Steering Committee Member

```
@Year - @Year @OrganizationName[, @Annotation]
@Year - @Year @OrganizationName[, @Annotation]
```

#### Coordinator

```
@Year - @Year @OrganizationName[, @Annotation]
@Year - @Year @OrganizationName[, @Annotation]
```

### Program Committee Chair

```
@Year @OrganizationName[, @Annotation]
@Year @OrganizationName[, @Annotation]
```

### Program Committee Member

```
@Year @OrganizationName[, @Annotation]@Year @OrganizationName[, @Annotation]
```

### Co-organizer

```
@Year @OrganizationName[, @Annotation]@Year @OrganizationName[, @Annotation]
```

### Research Proposal Reviewer

```
@Year @OrganizationName[, @Annotation]@Year @OrganizationName[, @Annotation]
```

#### Journal Reviewer

```
@Year @OrganizationName[, @Annotation]@Year @OrganizationName[, @Annotation]
```

#### Conference/Workshop Reviewer

```
@Year @OrganizationName[, @Annotation]@Year @OrganizationName[, @Annotation]
```

#### Other

```
@Year @OrganizationName[, @Annotation]
@Year @OrganizationName[, @Annotation]
```

### Department

| @Year - @Year | @CommitteeName[, @RoleOrExplanation][, @InstitutionIfNotIowa][, @Anno-               |
|---------------|--|
| @Year - @Year | tation] @CommitteeName[, @RoleOrExplanation][, @InstitutionIfNotIowa][, @Annotation] |

### College

| @Year - @Year | @CommitteeName[, @RoleOrExplanation][, @InstitutionIfNotIowa][, @Anno- |
|---------------|--|
|               | tation]  |
| @Year - @Year | @CommitteeName[, @RoleOrExplanation][, @InstitutionIfNotIowa][, @Anno- |
|               | tation]  |

### University

| @Year - @Year | @CommitteeName[, @RoleOrExplanation][, @InstitutionIfNotIowa][, @Anno-               |
|---------------|--|
| @Year - @Year | tation] @CommitteeName[, @RoleOrExplanation][, @InstitutionIfNotIowa][, @Annotation] |

### Community

| @Year - @Year | @OrgName, @CommitteeName[, @RoleOrExplanation][, @Annotation] |
|---------------|---|
| @Year - @Year | @OrgName, @CommitteeName[, @RoleOrExplanation][, @Annotation] |

# Industry

### @OtherScope

```
@Year - @Year @OrgName, @CommitteeName[, @RoleOrExplanation][, @Annotation] @Year - @Year @OrgName, @CommitteeName[, @RoleOrExplanation][, @Annotation]
```

### **Media Contributions**

```
@Year @MediaType, @MediaName, @ScopeOfDistribution[, @Annotation] @Year @MediaType, @MediaName, @ScopeOfDistribution[, @Annotation]
```

# Professional Development Activities