WEEK ONE: June 17 – June 21, 2019

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | Morning Lecture9:00 – 10:30 | Break10:30 – 10:45 | Morning Lecture10:45 – 12:15 | Lunch12:15 – 2:00 | Afternoon Session2:00 – 4:00 | Evening Session4:15 – 6:00 |
| Day 1Monday, June 17th | Room: 1680 SPH IWelcome Reception **Will begin at 8:00 a.m.** | Room: 1690 SPH ITitle: RCRS TrainingLecturer:B. Mukherjee:bhramar@umich.edu |  | 2750 SPH I438 WH1690 Beyster | Room: 1690 SPH I4:15-5:15Cluster demonstration: Dan Barker5:15-6:00Informal Q&A session:Sebastian ZoellnerMatt ZawistowskiTara SmithPedro Orozco del Pino |
| Day 2Tuesday, June 18th | Room: 1690 SPH ITitle: ReproducibleResearchLecturer: J. LeFaive: lefaivej@umich.edu |  | Room: 1690 SPH ITitle: Study design andInferenceLecturer: R Little:rlittle@umich.edu |  | 2750 SPH I438 WH1690 Beyster | Room: 1690 SPH ITitle: LinearRegressionLecturer: E. Hector: ehector@umich.edu OPTIONAL(Review) |
| Day 3Wednesday, June 19th | 1690 SPH ITitle: Logistic RegressionLecturer: E. Hector: ehector@umich.edu |  | Room: 1690 SPH ITitle: ObservationalData, BiasLecturer: R Little:rlittle@umich.edu |  | 2750 SPH I438 WH1690 Beyster | 1690 SPH ITitle: ProbabilityLecturer: H. Hartman: holhart@umich.eduOPTIONAL (Review) |
| Day 4Thursday, June 20th | 1690 SPH ITitle: Causal InferenceLecturer: Z. Wu:zhenkewu@umich.edu |  | Room: 1690 SPH ITitle: ParameterEstimation/LikelihoodLecturer: R Little:rlittle@umich.edu |  | 2750 SPH I438 WH1690 Beyster | 1690 SPH ITitle: Linear AlgebraLecturer: H. Hartman: holhart@umich.eduOPTIONAL (Review) |
| Day 5Friday, June 21st  | Room: 1690 SPH ITitle: Data Wrangling in R with dplyr - Part ILecturer: M. Flickinger:mflick@umich.edu |  | Room: 1690 SPH ITitle: Data Wrangling in R with dplyr - Part IILecturer: M. Flickinger:mflick@umich.edu | 12:30 Journey Lecture: Mike Boehnke | 2750 SPH I438 WH1690 Beyster | No Lecture |

WEEK TWO: June 24 – June 28, 2019

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | Morning Lecture9:00 – 10:30 | Break10:30 – 10:45 | Morning Lecture10:45 – 12:15 | Lunch12:15 – 2:00 | Afternoon Session2:00 – 4:00 | Evening Session4:15 – 6:00 |
| Day 6Monday, June 24th | Room: 1690 SPH ITitle: Visualizing Data in R with ggplot2 - Part ILecturer: M. Flickinger:mflick@umich.edu |  | Room: 1690 SPH ITitle: Visualizing Data in R with ggplot2 - Part IILecturer:M. Flickingermflick@umich.edu |  | 2750 SPH I438 WH1690 Beyster | Room: 1690 SPH ITitle: Generalized Linear ModelsLecturer: H. Hartman: holhart@umich.eduOPTIONAL (Advanced topic) |
| Day 7Tuesday, June 25th | Room: 1690 SPH ITitle:Machine Learning ILecturer: J. Wiens:wiensj@umich.edu |  | Room: 1690 SPH ITitle: Model Selection ILecturer: L. Beesley:lbeesley@umich.edu |  | 2750 SPH I438 WH1690 Beyster | None |
| Day 8Wednesday, June 26th | Room: 1690 SPH ITitle: Machine Learning IILecturer: J. Wiens:wiensj@umich.edu |  | Room: 1690 SPH ITitle: UnsupervisedLearning, Clustering ILecturer: D. Koutra:dkoutra@umich.edu |  | 2750 SPH I438 WH1690 Beyster | Room: 1690 SPH ITitle: Correlated Data ModelsLecturer: H. Hartman: holhart@umich.eduOPTIONAL (Advanced topic) |
| Day 9Thursday, June 27th | Room: 1690 SPH ITitle: UnsupervisedLearning, Clustering IILecturer: D. Koutra:dkoutra@umich.edu |  | Room: 1690 SPH ITitle: Model Selection IILecturer: L. Beesley:lbeesley@umich.edu |  | 2750 SPH I438 WH1690 Beyster | Room: 1690 SPH ITitle: Assessment of Predictive ModelsLecturer: P. Boonstra: philb@umich.eduOPTIONAL (Advanced topic) |
| Day 10Friday, June 28th  | Room: 1690 SPH ITitle: Python Workshop ILecturer: F. Kamran:fhdkmrn@umich.edu |  | Room: 1690 SPH ITitle: Python Workshop IILecturer: F. Kamran:fhdkmrn@umich.edu | State of the Institute: Bhramar Mukherjee12:30 Journey Lecture:Mousumi Banerjee  | 2750 SPH I438 WH1690 Beyster | None |

WEEK THREE: July 1 – July 5, 2019

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | Morning Lecture9:00 – 10:30 | Break10:30 – 10:45 | Morning Lecture10:45 – 12:15 | Lunch12:15 – 2:00 | Afternoon Session2:00 – 5:00 |
| Day 11Monday, July 1st  | Room: 1690 SPH ITitle: Data Mining 1Lecturer: K. Najarian:kayvan@med.umich.edu |  | Room: 1690 SPH ITitle: Visualization ILecturer: M. Kay:mjskay@umich.edu |  | 2750 SPH I438 WH1690 Beyster |
| Day 12Tuesday, July 2nd  | Room: 1690 SPH ITitle: Data Mining 2Lecturer: K. Najarian:kayvan@med.umich.edu |  | Room: 1690 SPH ITitle: Precision HealthLecturer: S. Kheterpal: [sachinkh@med.umich.edu](sachinkh%40med.umich.edu) |  | 2750 SPH I438 WH1690 Beyster |
| Day 13Wednesday, July 3rd  | Room: 1690 SPH ITitle: Visualization IILecturer: M. Kay:mjskay@umich.edu |  | Room: 1690 SPH ITitle: Intro to Bayes ILecturer: W. Wen:xwen@umich.edu |  | 2750 SPH I438 WH1690 Beyster |
| Day 14Thursday, July 4th | No Class – Independence Day |
| Day 15Friday, July 5th  | Room: 1690 SPH ITitle: Intro to BayesIILecturer: W. Wen:xwen@umich.edu |  | Room: 1690 SPH IState of the InstituteLecturer: B. Mukherjee:bhramar@umich.edu | Journey Lectures: 12:30Snigdha Panigrahi1:15Jeremy Taylor | 2750 SPH I438 WH1690 Beyster |

WEEK FOUR: July 8 – July 12, 2019

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | Morning Lecture9:00 – 10:30 | Break10:30 – 10:45 | Morning Lecture10:45 – 12:15 | Lunch12:15 – 2:00 | Afternoon Session2:00 – 5:00 |
| Day 16Monday, July 8th  | Room: 1690 SPH ITitle: TBDLecturer: I. Surakkaisurakka@umich.edu |  | Room: 1690 SPH ITitle: R MarkdownP. Boonstra: philb@umich.edu | Group Photo | M1123 SPH II438 WH1690 Beyster |
| Day 17Tuesday, July 9th  | Room: 1690 SPH ITitle:Bayes Computation ILecturer: Y.Chen:ychenang@umich.edu |  | Room: 1690 SPH ITitle: Bayes Computation IILecturer: Y.Chen:ychenang@umich.edu |  | M1123 SPH II438 WH1690 Beyster |
| Day 18Wednesday, July 10th  | Room: 1690 SPH ITitle: Reading like ascientific WriterLecturer: B. Griffiths:brettmegan@gmail.com |  | Room: 1690 SPH ITitle: Social NetworkLecturer: E. Adar:eadar@umich.edu |  | M1123 SPH II438 WH1690 Beyster |
| Day 19Thursday, July 11th  | Room: 1690 SPH ITitle: TBD (Cardiovascular)Lecturer: L. Lisabeth: llisabet@umich.edu |  | Room: 1690 SPH ITitle: Human-Centered Computing: Using Speech to Understand BehaviorLecturer: E. Provost: emilykmp@umich.edu |  | M1123 SPH II438 WH1690 Beyster |
| Day 20Friday, July 12th  | Room: 1690 SPH ITitle: Spatial EpidemiologyLecturer: J. Zelner: jzelner@umich.edu  |  | Room: 1690 SPH IState of the InstituteLecturer:B. Mukherjee:bhramar@umich.edu | 12:30 Journey Lecture: Cathie Spino | M1123 SPH II438 WH1690 Beyster |

WEEK FIVE: July 15 – July 19, 2019

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | Morning Lecture9:00 – 10:30 | Break10:30 – 10:45 | Morning Lecture10:45 – 12:15 | Lunch12:15 – 2:00 | Afternoon Session2:00 – 5:00 |
| Day 21Monday, July 15th  | Room: 1690 SPH ITitle: Natural LanguageProcessing ILecturer: K. Singh:kdpsingh@med.umich.edu |  | 1690 SPH ITitle: Natural LanguageProcessing IILecturer: K. Singh:kdpsingh@med.umich.edu |  | M1123 SPH II438 WH1690 Beyster |
| Day 22Tuesday, July 16th  | Room: 1690 SPH ITitle: Optimization ILecturer: H.M. Kanghmkang@umich.edu |  | 1690 SPH ITitle: Optimization IILecturer: H.M. Kanghmkang@umich.edu |  | M1123 SPH II438 WH1690 Beyster |
| Day 23Wednesday, July 17th  | Room: 1690 SPH ITitle: Writing from Point Ato Point D: Simple Strategiesfor Conveying ComplexIdeas.Lecturer: B. Griffiths:brettmegan@gmail.com |  | 1690 SPH ITitle: TBDLecturer: V. Baladandayuthapani:veerab@umich.edu |  | M1123 SPH II438 WH1690 Beyster |
| Day 24Thursday, July 18th  | Room: 1690 SPH ITitle: TBDLecturer: A. Raoukarvind@umich.edu |  | 1690 SPH ITitle: Optimzation InHealthLecturer: B. Dentonbtdenton@med.umich.edu |  | M1123 SPH II438 WH1690 Beyster |
| Day 25Friday, July 19th  | Room: 1690 SPH ITitle: TBDLecturer: B. Nallamothubnallamo@umich.edu |  | 1690 SPH IState of the InstituteLecturer: S. Zoellner:szoellne@umich.edu | Journey Lectures:12:30Pedro Orozco del Pino1:15Lauren Beesley  | M1123 SPH II438 WH1690 Beyster |

WEEK SIX: July 22 – July 26, 2019

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | Morning Lecture9:00 – 10:30 | Break10:30 – 10:45 | Morning Lecture10:45 – 12:15 | Lunch12:15 – 2:00 | Afternoon Session2:00 – 5:00 |
| Day 26Monday, July 22nd  | Room: 1690 SPH ITitle: Preparing forGraduate SchoolLecturer: K. Kidwell:kidwell@umich.edu |  | Room: 1690 SPH ITitle: CV and ResumesLecturer: K. Forbes:forbeskr@umich.edu |  | M1123 SPH II438 WH1690 Beyster |
| Day 27Tuesday, July 23rd  | Room: 1690 SPH ITitle: TBDLecturer: B. Griffiths:brettmegan@gmail.com |  | Room: 1690 SPH IProject Work time |  | M1123 SPH II438 WH1690 Beyster |
| Day 28Wednesday, July 24th  | Room: 1690 SPH IProject Work time |  | Room: 1690 SPH I10:45-11:45Project work time | 11:45-1:30 Lunch | 1:30-2EvaluationsPoster session info2-41690Rehearsal for presentations |
| Day 29Thursday, July 25th  | SymposiumRackham Fourth Floor  |
| Day 30Friday, July 26th  | Professional Development Day Room: 1690 SPH IRoom 1690 SPH IRoom 1680 SPH I (Breakfast and Lunch) Journey Lecture – Bhramar Mukherjee |

BDSI 2019 Project Groups

**Data Mining -** **BDSI.2019.DM@umich.edu**

Instructors: Johann Gagnon-Bartsch johanngb@umich.edu

 Jonathan Terhorst jonth@umich.edu

Co-mentors: Zoe Rehnberg zrehnber@umich.edu

 Anwesha Bhattacharyya anwebha@umich.edu

**Genomics -** **BDSI.2019.Genomics@umich.edu**

Instructors: Matt Zawistowski mattz@umich.edu

 Xiang Zhou xzhousph@umich.edu

 Sarah Gagliano sarahgag@umich.edu

Co-mentor: Brooke Wolford bwolford@umich.edu

**Machine Learning -** **BDSI.2019.ML@umich.edu**

Instructor: Jenna Wiens wiensj@umich.edu

Co-mentor: Shengpu Tang tangsp@umich.edu

BDSI 2019 Contact Information

|  |
| --- |
| **Summer Institute Main Contacts** |
| Program Director | Bhramar Mukherjee | bhramar@umich.edu |
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| Program Coordinator | Tara Smith | tarakaz@umich.edu |
| Program On-site Coordinator | Davina Barron | davinab@umich.edu |
| Project Coordinator | Pedro Orozco del Pino | porozco@umich.edu |
| Student Coordinator (Events) | Kim Hochstedler | [hochsted@umich.edu](hochsted%40umich.edu) |

|  |  |
| --- | --- |
| **Group Name** | **Group Email** |
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| Genomics Research Project Team | BDSI.2019.Genomics@umich.edu |
| Machine Learning Research Project Team | BDSI.2019.ML@umich.edu |
| Data Mining Research Project Team | BDSI.2019.DM@umich.edu |
| Project Mentors – All Project Teams | BDSI.2019.Project.Leaders@umich.edu |
| Project Mentors and Co-Mentors – All Project Teams | BDSI.2019.GSI.Project.Leaders@umich.edu |