

# A Complete Bibliography of *ACM Transactions on Spatial Algorithms and Systems (TSAS)*

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## Title word cross-reference

1 [ALSA23]. 2 [ABM16, ALSA23, WK18]. 3 [ABM16, TLV<sup>+</sup>22, VTSD18]. *A\** [PWH21]. *K* [PAB<sup>+</sup>16, CCBS18].

1 [ZAG22]. **19** [ACC<sup>+</sup>22, ADV<sup>+</sup>22, BDS22, BM22, CCB<sup>+</sup>22, CB22, MAM<sup>+</sup>22, MUUR22, PB22, RZS<sup>+</sup>22, ZTC<sup>+</sup>22, ZAG22, ZGA22].

**2** [ZGA22]. **2017** [Are19]. **2019** [Are21]. **2020** [Are23a]. **2021** [Are23b].

**Accessible** [KKT<sup>+</sup>18]. **Accessing** [CSF<sup>+</sup>19]. **accident** [HHRR20]. **Accumulated** [KS15]. **Accurate** [ABY17, BBS19, RZS<sup>+</sup>22, WLL<sup>+</sup>19]. **ACM** [Are19, Are21, Are23a, Are23b]. **Activity** [HHYT24, MH19]. **Activity-aware** [MH19]. **Adaptive** [DAGM21, DPG20]. **adjusted** [LL24]. **Advancements** [JZZ<sup>+</sup>22]. **Adversarial** [MUUR22, WCC<sup>+</sup>20, WFL<sup>+</sup>23, WGJT23]. **Aerial** [DV23]. **Against** [GDSB16]. **Agent** [ASJ<sup>+</sup>23]. **Agents** [KKT<sup>+</sup>18]. **Aggregate** [DCY<sup>+</sup>18]. **Aggregating** [BGL<sup>+</sup>23]. **Aggregation** [JJN22, PWH21, VTSD18]. **Aggregation-based** [JJN22]. **AI** [Wer21]. **AI-Enhanced** [Wer21]. **Air** [SKZ<sup>+</sup>20]. **Aircraft** [ACS19]. **AIST** [RH23]. **Algorithm** [BMNP16, BVW16, FAMF16, PLHC19]. **Algorithms** [BCC<sup>+</sup>23, GHN15, Gol19, KTY<sup>+</sup>18, YKC20]. **Along** [MKW20, MUUR22]. **among**

[EP20, GHPS21]. **Analysis** [BM20, FRV<sup>+</sup>22, LA19, MIF17, RLA19, SNBS22]. **Analytics** [LLJ<sup>+</sup>23]. **Analyzing** [BPS18, HWD<sup>+</sup>23, ZTC<sup>+</sup>22]. **Angular** [Pet21]. **Anomalous** [DPKW19]. **Anomaly** [SGBM20, WLL<sup>+</sup>19]. **Apache** [WMPH19]. **Application** [AT23, JS19, TIKG18, TL20]. **Applications** [AWD<sup>+</sup>18, FNCO20, SGBM20]. **Applied** [EP20]. **Approach** [ARF19, FNCO20, HBH<sup>+</sup>21, KPS17, LLC<sup>+</sup>22, MKW20, SSSJ24, TLF<sup>+</sup>20]. **Approaches** [CDFP21, JJN22]. **Apps** [CSKB19]. **Archival** [UMR<sup>+</sup>23]. **Area** [BMVS16, PWH21, Pet21]. **Area-Preserving** [BMVS16]. **Arrangements** [PSD<sup>+</sup>21]. **Arrival** [PYJM23]. **Arterial** [MKW20]. **Assays** [LLC<sup>+</sup>22]. **Assessment** [LNK<sup>+</sup>21]. **Assigned** [TSK15]. **Assignment** [SSTN19]. **Assimilation** [LH17]. **Assisted** [HKK<sup>+</sup>19]. **ASTRO** [ACC<sup>+</sup>22]. **Attacks** [GDSB16]. **Attention** [HHYT24, LL24, RH23, ZWT<sup>+</sup>20]. **Attention-adjusted** [LL24]. **Attention-Based** [RH23]. **Attraction** [RRW22]. **Attribute** [YHT<sup>+</sup>23]. **Auto** [STZ<sup>+</sup>20, ZGP19]. **Auto-Encoders** [STZ<sup>+</sup>20]. **Auto-regressive** [ZGP19]. **Autologistic** [SMM19]. **Automated** [Tan22, WFL<sup>+</sup>23]. **Automatic** [ZSBA21]. **Automatically** [SSSJ24]. **Avoidance** [ACC<sup>+</sup>22]. **Aware** [CKT<sup>+</sup>19, GKR16, HYL16, SSSJ24, DV21, MH19, NKTB20]. **Axis** [TIKG18].

**Backhaul** [BCJ<sup>+</sup>23]. **Balancing** [DAGM21]. **Based** [ASJ<sup>+</sup>23, AFHW15, FNCO20, GDSB16, LH22, LH17, MAK<sup>+</sup>18, MIF17, PK16, RH23, YÖR20, ZGP19, BM20, BASM21, CCA23, FYZ<sup>+</sup>22, JJN22, KCY22, MRC22, MKW20, WCM20, YSWZ18, RYYH23]. **Batch** [CCBS18]. **Batching** [JSR<sup>+</sup>22]. **Bayesian** [KSR23, LLC<sup>+</sup>22]. **Behavior** [HKK<sup>+</sup>19, LZLL20, RRW22, ZSFB20]. **Behaviors** [TKC17]. **Best** [Are19, Are21, Are23a, Are23b, JJN22]. **between** [SSZ23]. **Bi** [LH22]. **Bi-Objective** [LH22]. **Big** [DAGM21, VBME21]. **Binary** [TYZO15]. **Bodies** [SSZ23]. **Both** [JJN22]. **Boundaries** [LLC<sup>+</sup>22]. **Boundary** [GHN15]. **Boundary-Labeling** [GHN15]. **Bucket** [TYZO15]. **Building** [SNBS22]. **Buy** [AKRH19].

**Cache** [CCA23]. **Cache-based** [CCA23]. **Campus** [ZTC<sup>+</sup>22]. **Candidates** [NLC16]. **Cascade** [HWD<sup>+</sup>23]. **Case** [BDS22, QKZU20]. **Categorical** [SMM19]. **Category** [TTZ23]. **Cavity** [CDFP21]. **CellNet** [MIF18]. **Cellular** [CSF<sup>+</sup>19]. **Centric** [GDSB16]. **Chains** [PSD<sup>+</sup>21]. **Challenges** [JZZ<sup>+</sup>22]. **Chest** [MUUR22]. **Cities** [ZSBA21]. **City** [DBB20, WFL<sup>+</sup>23]. **CityLightSense** [MRC22]. **Citywide** [HHYT24]. **Classification** [CEGH17]. **Clearance** [BCJ<sup>+</sup>23]. **Clicks** [DPD22]. **Closed** [Pet21]. **Closed-Form** [Pet21]. **Closure** [PLHC19]. **Cloud** [BPM21, PBGA19]. **Clouds** [BGL<sup>+</sup>23]. **Clustered** [JS19]. **Clustering** [BASM21]. **Clusters** [XWG<sup>+</sup>22]. **CNN** [MUUR22]. **Co** [AKAM17, PSD<sup>+</sup>21, PAB<sup>+</sup>16]. **Co-occurrence** [PAB<sup>+</sup>16]. **Co-Occurrences** [AKAM17]. **Collaborative** [ATS<sup>+</sup>16]. **Collective** [ISNU17]. **Combination** [TYZO15]. **Combining** [CDFP21]. **Communities** [ALM24, FNCO20]. **Comparison** [AFHW15]. **Competitive** [LH23]. **Complex** [MF15, TLV<sup>+</sup>22]. **Compression** [PBGA19]. **Computation** [FAMF16, JS19, KKT<sup>+</sup>18, KS15]. **Computer** [TLF<sup>+</sup>20]. **Computing** [AKRH19, PSD<sup>+</sup>21, SSZ23, XWG<sup>+</sup>22]. **Conference** [Are19, Are21, Are23a, Are23b]. **Configuration** [WFL<sup>+</sup>23]. **Confined**

[FRV<sup>+</sup>22]. **Conflict** [ACS19]. **Congestion** [CKT<sup>+</sup>19]. **Congestion-Aware** [CKT<sup>+</sup>19]. **Conquer** [MICNC21]. **Consensus** [ATS<sup>+</sup>16]. **Considering** [ROOF17, YÖR20]. **Consistent** [CKM<sup>+</sup>21]. **Constrained** [TTZ23]. **Constraints** [ZGP19]. **Contact** [ACC<sup>+</sup>22, JZZ<sup>+</sup>22, KCY22, LKT<sup>+</sup>22, MXZY22, Tan22]. **Containment** [LKT<sup>+</sup>22]. **Context** [DV21, NKTB20, DCAA21]. **Context-aware** [DV21, NKTB20]. **Continuous** [ZYW<sup>+</sup>21]. **Contrast** [LZLL20]. **Control** [ARF19, ZTC<sup>+</sup>22]. **Controlled** [LZLL20]. **Convolutional** [CCB<sup>+</sup>22, HHRR20]. **Coordinate** [BDW18]. **Coordinate-Free** [BDW18]. **Corridors** [KTHK19]. **Cost** [KS15]. **Coupled** [SGBM20]. **COVID** [ACC<sup>+</sup>22, ADV<sup>+</sup>22, BM22, CCB<sup>+</sup>22, CB22, MAM<sup>+</sup>22, MUUR22, PB22, RZS<sup>+</sup>22, ZTC<sup>+</sup>22, ZAG22, ZGA22, BDS22]. **COVID-19** [ACC<sup>+</sup>22, ADV<sup>+</sup>22, BM22, CCB<sup>+</sup>22, CB22, MAM<sup>+</sup>22, MUUR22, PB22, RZS<sup>+</sup>22, ZTC<sup>+</sup>22, ZAG22, ZGA22, BDS22]. **Crime** [BPS18, RH23]. **criteria** [LH23]. **Crowd** [CSF<sup>+</sup>19, HBH<sup>+</sup>21, HKK<sup>+</sup>19, HHYT24, WLL<sup>+</sup>19, WCC<sup>+</sup>20]. **Crowd-sourced** [HBH<sup>+</sup>21]. **Crowds** [NLC16]. **Crowdsourced** [BPS18, LNK<sup>+</sup>21, SPKS16]. **Crowdsourcing** [CN20, LCKQ20, TSK15]. **Curves** [EP20]. **Cusps** [Pet21].

**D** [ABM16, ALSA23, TLV<sup>+</sup>22, VTSD18, WK18]. **Data** [AT23, AKM21, AH17, ACS19, BPS18, BDKS19, CSF<sup>+</sup>19, CEGH17, CCA23, DAGM21, DHQ<sup>+</sup>21, DPG20, DV21, FRV<sup>+</sup>22, HBH<sup>+</sup>21, ISNU17, KPS17, KSR23, LH17, MR21, NKTB20, PBGA19, PLHC19, RZS<sup>+</sup>22, SSSJ24, SGBM20, UMR<sup>+</sup>23, VTSD18, VBME21, Wer21, ZXTZ24, ZSBA21]. **Data-Driven** [SSSJ24, ACS19, DV21, FRV<sup>+</sup>22]. **Database** [SS21]. **Databases** [TL20]. **Datasets** [BMNP16, JSL<sup>+</sup>20, PAB<sup>+</sup>16, SGA<sup>+</sup>23, TDPT20, Wer21]. **Decomposition** [CDFP21]. **Deep** [DPG20, FNCO20, RH23, SKZ<sup>+</sup>20, TL20, VBME21, WCM20, YHT<sup>+</sup>23, YKC20, ZSBA21, ZYLZ23]. **Definition** [ZXTZ24]. **Delivery** [JSR<sup>+</sup>22]. **Demand** [ARF19]. **Density** [TLF<sup>+</sup>20]. **Dependency** [ZGP19]. **Deployment** [DBB20]. **Design** [PB22]. **Detail** [VTSD18]. **Detecting** [FHK<sup>+</sup>18]. **Detection** [ACS19, DPKW19, HHRR20, PLHC19, SGBM20, SOdB<sup>+</sup>20, WLL<sup>+</sup>19, YHT<sup>+</sup>23]. **Determination** [RJ24, ROOF17]. **Deviations** [FHK<sup>+</sup>18]. **Diagnoses** [MUUR22]. **Diagrams** [ZYW<sup>+</sup>21]. **Dictionary** [PBGA19]. **Differentially** [SGA<sup>+</sup>23]. **Differentiating** [ZSFB20]. **Direction** [LA19]. **Disaster** [DBB20]. **Discovery** [NLC16]. **Discrete** [EP20]. **Disease** [ASJ<sup>+</sup>23]. **Disk** [MAK<sup>+</sup>18]. **Disk-Based** [MAK<sup>+</sup>18]. **Displacement** [LLC<sup>+</sup>22]. **Distance** [AFHW15, GPS23, SSZ23, TTZ23]. **Distances** [EP20]. **Distortion** [Pet21]. **Distributed** [ARF19, DAGM21, LH23, TDPT20, WMPH19]. **Distribution** [BPS18]. **Diversity** [DHQ<sup>+</sup>21]. **Divide** [MICNC21]. **Drift** [SOdB<sup>+</sup>20]. **Driven** [SSSJ24, ACS19, DV21, FRV<sup>+</sup>22]. **Driving** [LZLL20, WLL<sup>+</sup>19]. **Drones** [WGJT23]. **DropBox** [DBB20]. **Dwell** [UMR<sup>+</sup>23]. **Dynamic** [ALM24, BXKR23, DV21, EP20, GKR16, JSR<sup>+</sup>22, PMMK22]. **Dynamics** [AT23, QKZU20].

**Early** [BDS22]. **Editorial** [Are23a, Are23b]. **Effect** [BDS22]. **Effects** [LKT<sup>+</sup>22]. **Efficient** [ABY17, BBS19, DBB20, EEP16, FAMF16, KKT<sup>+</sup>18, RHJC19, RJ24, ROOF17, SS21, TYZO15, TLV<sup>+</sup>22]. **Electrical** [SFGK23]. **Embedding** [LLJ<sup>+</sup>23, QRS<sup>+</sup>23]. **enabled** [XWG<sup>+</sup>22]. **Enabling** [RYYH23]. **Encoders** [STZ<sup>+</sup>20]. **End** [ZWT<sup>+</sup>20]. **End-to-End** [ZWT<sup>+</sup>20]. **Energy** [ABY17]. **Energy-Efficient**

[ABY17]. **Engulfs** [BDW18]. **Enhanced** [KTY<sup>+</sup>18, Wer21]. **Enrichment** [TL20]. **Entities** [SS21]. **Environment** [ATS<sup>+</sup>16, KCY22, TIKG18]. **Environmental** [FNCO20]. **Environments** [WGJT23]. **Epidemic** [ADV<sup>+</sup>22, FYZ<sup>+</sup>22, WCM20]. **Equal** [Pet21]. **Equal-Area** [Pet21]. **Estimating** [ISNU17, SKZ<sup>+</sup>20]. **Estimation** [JJN22, SPKS16, TLF<sup>+</sup>20]. **Euclidean** [EP20, LH22]. **Evaluating** [MAM<sup>+</sup>22]. **Evaluation** [WFL<sup>+</sup>23]. **Event** [GDSB16, PK16, ZCLR16]. **Event-Based** [PK16]. **Evidence** [LLC<sup>+</sup>22]. **Evolution** [CCB<sup>+</sup>22]. **Evolving** [HWD<sup>+</sup>23]. **Example** [PSTT16]. **Exchange** [DBB20]. **Execution** [KCY22]. **Experiment** [LZLL20]. **Expert** [NLC16]. **Exploiting** [LH23]. **Exploring** [SKZ<sup>+</sup>20]. **Exposure** [ACC<sup>+</sup>22]. **Extended** [PAB<sup>+</sup>16]. **External** [FAMF16, GDSB16].

**Family** [FDMW20]. **Fast** [JS19, LCKQ20]. **Faster** [MUUR22]. **Feature** [YSWZ18]. **Feature-based** [YSWZ18]. **Features** [ZSFB20]. **Fencing** [TYZO15]. **Filter** [AT23]. **Filtering** [LH17]. **Finding** [KTHK19, PWH21]. **Fingerprint** [LNK<sup>+</sup>21]. **fitting** [JJN22]. **Flash** [TPZ15]. **Flexible** [MH19]. **Flood** [LA19, RLA19]. **Flood-Risk** [LA19]. **Flow** [ALSA23, ISNU17, WCC<sup>+</sup>20]. **Flows** [SFGK23]. **Food** [JSR<sup>+</sup>22]. **FoodMatch** [JSR<sup>+</sup>22]. **Football** [CEGH17]. **Force** [YÖR20]. **Forecasting** [LL24, WCM20, ZCLR16]. **Form** [Pet21]. **Fragile** [WK18]. **Framework** [ALM23, AH17, ACS19, LCKQ20, LH22, LLJ<sup>+</sup>23, MICNC21, SGA<sup>+</sup>23, TSK15]. **Fréchet** [EP20, GHPS21, GPS23]. **Free** [BDW18]. **Frequent** [Val22]. **Fresnel** [BCJ<sup>+</sup>23]. **Function** [JJN22]. **Function-fitting** [JJN22]. **Furniture** [ZXTZ24].

**Games** [PB22]. **GAN** [WCC<sup>+</sup>20]. **GANs** [JSL<sup>+</sup>20, SGBM20]. **Gazetteer** [SSSJ24]. **General** [AH17]. **Generalized** [RHJC19, UMR<sup>+</sup>23]. **Generating** [JSL<sup>+</sup>20, MF15]. **Generation** [BBS19, KPS17, WFL<sup>+</sup>23]. **Generative** [MUUR22, WCC<sup>+</sup>20]. **Generic** [TPZ15]. **Geo** [AKM21, NLC16, TYZO15, LLJ<sup>+</sup>23]. **Geo-Fencing** [TYZO15]. **Geo-Located** [NLC16]. **Geo-Social** [AKM21]. **Geo-Tile2Vec** [LLJ<sup>+</sup>23]. **Geochemical** [LLC<sup>+</sup>22]. **Geocoding** [SSSJ24]. **Geographic** [DPD22, WGJT23]. **Geographic-Region** [WGJT23]. **Geographical** [FNCO20, RRW22]. **Geographically** [BBS19]. **Geography** [NT18]. **Geolocation** [DPD22]. **Geological** [LLC<sup>+</sup>22]. **Geometric** [BMNP16]. **Geosensor** [BDW18]. **Geospatial** [AT23, CCB<sup>+</sup>22, PMMK22, SGA<sup>+</sup>23, ZSFB20]. **Global** [CB22, Wer21, ZSBA21]. **Global-scale** [CB22, ZSBA21]. **GloBiMapsAI** [Wer21]. **GPS** [ABY17, FHK<sup>+</sup>18, HBH<sup>+</sup>21, MIF17, MIF18, SSTN19, YSWZ18]. **GPS-Less** [ABY17]. **GPU** [ABM16]. **Graph** [KTHK19, LL24, SS21]. **Graphical** [ISNU17]. **Graphics** [KS15]. **Graphs** [DPKW19]. **Grid** [LH22, MIF17]. **Grid-Based** [LH22, MIF17]. **Grids** [ABM16]. **Group** [AAGS22, KKT<sup>+</sup>18, MH19, PK16, RHJC19]. **GTS** [LCKQ20]. **guided** [WCM20].

**Hailing** [JSL<sup>+</sup>20]. **Hashing** [TYZO15]. **Height** [SGA<sup>+</sup>23]. **Heterogeneous** [ZYLZ23]. **Hierarchical** [FDMW20, RJ24, VTSD18]. **High** [CB22, MAM<sup>+</sup>22, RZS<sup>+</sup>22, ZXTZ24]. **High-Definition** [ZXTZ24]. **High-Resolution** [MAM<sup>+</sup>22, RZS<sup>+</sup>22, CB22]. **Highway** [TL20]. **Historical** [BVW16]. **Homogeneous** [SGA<sup>+</sup>23]. **Hotspots**

[LKT<sup>+</sup>22]. **HTF** [SGA<sup>+</sup>23]. **Human** [DHQ<sup>+</sup>21, FYZ<sup>+</sup>22, HKK<sup>+</sup>19, QRS<sup>+</sup>23, SGBM20, DCAA21, WLL<sup>+</sup>19]. **Hybrid** [TYZO15].

**Identifying** [BDW18, FNCO20]. **IGMM** [SGBM20]. **IGMM-GANs** [SGBM20]. **Illumination** [MRC22]. **Images** [GHN15, SKZ<sup>+</sup>20]. **Imbalance** [ARF19]. **Impact** [CSKB19, DCAA21, ZTC<sup>+</sup>22]. **Improving** [DBB20]. **Imputation** [QRS<sup>+</sup>23]. **In-Bucket** [TYZO15]. **In-memory** [XWG<sup>+</sup>22]. **In-Route** [CN20]. **Incorporating** [STZ<sup>+</sup>20]. **Incremental** [DPG20]. **Index** [GHPS21, SS21, TPZ15]. **Indexes** [FDMW20]. **Indexing** [KTY<sup>+</sup>18, MAK<sup>+</sup>18]. **Individual** [FYZ<sup>+</sup>22, SSTN19, DCAA21]. **Individual-level** [FYZ<sup>+</sup>22]. **Indoor** [LNK<sup>+</sup>21, RYYH23, TKC17]. **Infection** [CB22, LKT<sup>+</sup>22, MUUR22]. **Infectious** [ASJ<sup>+</sup>23]. **Inference** [HBH<sup>+</sup>21, ZSBA21]. **Inferring** [MIF18]. **Inflow** [BDS22]. **Influence** [HYL16]. **Influence-Aware** [HYL16]. **Information** [AKRH19, DBB20, ROOF17, WCM20]. **Informed** [ADV<sup>+</sup>22]. **Infrastructure** [BPM21]. **Integer** [PWH21]. **Intelligent** [HHRR20]. **Intended** [FHK<sup>+</sup>18]. **Interaction** [ALM24, YÖR20]. **Interactions** [BM22]. **Interactive** [BVW16, HHYT24]. **Interchange** [TL20]. **Interlinking** [PMMK22]. **Internet** [NT18]. **Interpolation** [ABM16, MR21]. **Interpretable** [RH23, ZGP19]. **Intersection** [HHRR20]. **Introduction** [Are19, Are21, Gol19, MXZY22, YKC20, ZAG22, ZGA22]. **IP** [DPD22]. **Issue** [Are19, Are23a, Are23b, Gol19, MXZY22, YKC20, ZAG22, ZGA22]. **Issues** [ZXTZ24].

**Join** [TDPT20, WMPH19].

**Kalman** [AT23]. **Keyword** [AKM21].

**Keywords** [AAGS22].

**Labeling** [GHN15]. **Labels** [BGL<sup>+</sup>23, BVW16]. **Labourer** [BDS22]. **Large** [AT23, BXKR23, LCKQ20, MICNC21, SGA<sup>+</sup>23]. **Large-Scale** [BXKR23, LCKQ20, AT23]. **Laser** [RYYH23]. **Latest** [JZZ<sup>+</sup>22]. **Layered** [KPS17, TIKG18]. **Learning** [FNCO20, LL24, RH23, SKZ<sup>+</sup>20, TL20, VBME21, WCM20, WFL<sup>+</sup>23, YHT<sup>+</sup>23, YKC20, ZGP19]. **Learning-based** [WCM20]. **Less** [ABY17]. **Level** [VTSD18, FYZ<sup>+</sup>22, QRS<sup>+</sup>23]. **Level-of-Detail** [VTSD18]. **levels** [MRC22]. **Life** [FRV<sup>+</sup>22]. **LifeSteps** [PSTT16]. **Likelihood** [LLC<sup>+</sup>22]. **Line** [BCJ<sup>+</sup>23]. **Linear** [PWH21]. **Links** [BCJ<sup>+</sup>23]. **Load** [DAGM21]. **Local** [NLC16]. **Localization** [ABY17, DV23, RYYH23]. **Located** [NLC16]. **Location** [DHQ<sup>+</sup>21, GDSB16, KKT<sup>+</sup>18, PK16, RRW22, SPKS16, WK18]. **Location-** [PK16]. **Location-Centric** [GDSB16]. **Logic** [SMM19]. **Long** [ACS19]. **Long-Range** [ACS19]. **Look** [Tan22]. **Low** [Pet21, YSWZ18]. **Low-Sampling-Rate** [YSWZ18]. **LSTM** [STZ<sup>+</sup>20].

**Management** [PBGA19, SS21]. **Many** [JS19]. **Many-to-many** [JS19]. **Map** [AFHW15, CFWW20, HBH<sup>+</sup>21, JS19, Pet21, SKZ<sup>+</sup>20, WK18, YSWZ18]. **Map-Matching** [CFWW20]. **MapLUR** [SKZ<sup>+</sup>20]. **Mapping** [MRC22]. **Maps** [BBS19, BVW16, KPS17, LNK<sup>+</sup>21, ZXTZ24]. **Markers** [BVW16]. **Markov** [SMM19]. **Massive** [TDPT20]. **Matches** [CEGH17]. **Matching** [AWD<sup>+</sup>18, BVW16, CFWW20, DPKW19, JS19, JSR<sup>+</sup>22, LH22, YSWZ18]. **MaxCRS** [AH17]. **Maximum** [CKM<sup>+</sup>21]. **MaxRS** [AH17]. **Meaningful** [Val22]. **Measures** [LKT<sup>+</sup>22]. **Measuring** [AKAM17, CSKB19]. **Mechanism** [PB22]. **Medial** [TIKG18]. **Memetic** [BCC<sup>+</sup>23].

**Memory** [FAMF16, XWG<sup>+</sup>22]. **Mesh** [TIKG18]. **Meshes** [FDMW20]. **Method** [MIF17]. **Metrics** [EP20, MAM<sup>+</sup>22]. **Metropolitan** [CSF<sup>+</sup>19, FRV<sup>+</sup>22]. **MFPMiner** [Val22]. **Micro** [BM22]. **Micro-Spatial** [BM22]. **Microblogs** [ZCLR16]. **Migrant** [BDS22]. **Minimal** [Pet21]. **Minimizing** [BM22]. **Mining** [LZLL20, PAB<sup>+</sup>16, TKC17, Val22]. **Mitigation** [BXKR23]. **Mixture** [ISNU17]. **Mobile** [BPM21, BDW18, CSF<sup>+</sup>19, KKT<sup>+</sup>18, LCKQ20]. **Mobility** [ARF19, CSF<sup>+</sup>19, DHQ<sup>+</sup>21, FYZ<sup>+</sup>22, FRV<sup>+</sup>22, Gol19, QKZU20, RZS<sup>+</sup>22, SGBM20, SOdB<sup>+</sup>20, DCAA21, WLL<sup>+</sup>19, ZTC<sup>+</sup>22, ZSFB20]. **Mobility-based** [FYZ<sup>+</sup>22]. **Mobility-on-Demand** [ARF19]. **Modal** [LLJ<sup>+</sup>23]. **Model** [ARF19, CB22, DPG20, HWD<sup>+</sup>23, LA19, RH23, YÖR20]. **Modeling** [ASJ<sup>+</sup>23, AT23, ADV<sup>+</sup>22, CCB<sup>+</sup>22, FRV<sup>+</sup>22]. **Models** [ASJ<sup>+</sup>23, ISNU17]. **Monitoring** [AH17, MRC22, WGJT23]. **Most** [PAB<sup>+</sup>16]. **Motion** [YÖR20]. **Movement** [KTHK19]. **Moving** [MF15, SSZ23, TLF<sup>+</sup>20]. **Multi** [LH23, LLJ<sup>+</sup>23, TIKG18, WCC<sup>+</sup>20, YÖR20, ZYLZ23]. **Multi-criteria** [LH23]. **Multi-Layered** [TIKG18]. **Multi-Modal** [LLJ<sup>+</sup>23]. **Multi-Pedestrian** [YÖR20]. **Multi-source** [ZYLZ23]. **Multi-Stage** [LLJ<sup>+</sup>23]. **Multi-step** [WCC<sup>+</sup>20]. **Multiflow** [LA19]. **Multiflow-Direction** [LA19]. **Multimodal** [YHT<sup>+</sup>23]. **Multinomial** [SMM19]. **Multiple** [QRS<sup>+</sup>23]. **Multiple-level** [QRS<sup>+</sup>23]. **Multirow** [GHN15]. **Multivariate** [LZLL20].

**Names** [SSSJ24]. **Natural** [ABM16]. **Navigation** [DV21, TIKG18]. **Near** [HHRR20]. **Near-accident** [HHRR20]. **Nearest** [EEP16, GPS23, HYL16, ZYW<sup>+</sup>21]. **Nearest-Neighbor** [EEP16]. **Neighbor** [ABM16, EEP16, HYL16, ZYW<sup>+</sup>21]. **Nets** [WCC<sup>+</sup>20]. **Network** [DPG20, KPS17, LH23, MUUR22, WLL<sup>+</sup>19]. **Networks** [BM20, BDW18, CSKB19, CCB<sup>+</sup>22, GDSB16, HWD<sup>+</sup>23, HHRR20, JSR<sup>+</sup>22, KTY<sup>+</sup>18, KSR23, LL24, MIF18, PK16, RHJC19, SMM19]. **Neural** [CCB<sup>+</sup>22]. **Non** [SSSJ24]. **Non-Gazetteer** [SSSJ24]. **Number** [LGLG19].

**Objective** [LH22]. **Objects** [TLV<sup>+</sup>22]. **Obstructed** [ZYW<sup>+</sup>21]. **Occupancy** [SNBS22, ZTC<sup>+</sup>22]. **occurrence** [PAB<sup>+</sup>16]. **Occurrences** [AKAM17]. **Odisha** [BDS22]. **Officer** [STZ<sup>+</sup>20]. **Online** [ZCLR16]. **Open** [BPS18]. **Operational** [QKZU20]. **Optimal** [KKT<sup>+</sup>18, PWH21]. **Optimizations** [STZ<sup>+</sup>20]. **Optimizing** [LCKQ20]. **Origin** [TTZ23]. **Other** [MUUR22]. **Our** [PSTT16]. **Outdoor** [ABY17]. **overhead** [RYYH23]. **Overlay** [BDKS19].

**PAGE** [ALM23]. **Paired** [LZLL20]. **Pandemic** [PB22]. **Panorama** [GHN15]. **Papers** [Are19, Are21, Are23a, Are23b]. **Paradigm** [SKZ<sup>+</sup>20]. **Parallel** [ALM23, LH22]. **Parking** [STZ<sup>+</sup>20]. **Part** [ZAG22, ZGA22]. **Participatory** [MR21, MRC22]. **Particle** [LH17]. **Partition** [LH17]. **Partition-Based** [LH17]. **Partitioning** [BCC<sup>+</sup>23, VBME21]. **Passenger** [MKW20]. **Passenger-based** [MKW20]. **Passes** [CEGH17]. **Path** [AFHW15, DPKW19]. **Path-Based** [AFHW15]. **Paths** [CFWW20, JS19, TTZ23]. **Patrolling** [STZ<sup>+</sup>20]. **Pattern** [LZLL20]. **Patterns** [BASM21, PAB<sup>+</sup>16, SOdB<sup>+</sup>20, Val22]. **PCT** [KCY22]. **PCT-TEE** [KCY22]. **Pebbles** [BDKS19]. **Pedestrian** [TLF<sup>+</sup>20, YÖR20]. **People** [ISNU17]. **Personalized** [AKM21, DV21, LGLG19, PK16, SSTN19]. **Phenomena** [BPM21]. **Physically** [CKM<sup>+</sup>21]. **Place** [SSSJ24]. **Planning** [BCJ<sup>+</sup>23, FNCO20, MH19, WFL<sup>+</sup>23].

**Platform** [FYZ<sup>+</sup>22, XWG<sup>+</sup>22]. **POI** [SSTN19, ZWT<sup>+</sup>20]. **Point** [BGL<sup>+</sup>23, BASM21, DV23, PBGA19, QRS<sup>+</sup>23, SOdB<sup>+</sup>20]. **POIs** [MH19]. **Policies** [ZTC<sup>+</sup>22]. **Pollution** [SKZ<sup>+</sup>20]. **Polygon** [CDFP21]. **Polygonal** [BMVS16]. **Population** [AT23, FRV<sup>+</sup>22, ISNU17, ZSFB20]. **position** [LNK<sup>+</sup>21]. **Post** [DBB20]. **Post-Disaster** [DBB20]. **Posterior** [DPKW19]. **Postprocessing** [BVW16]. **Practical** [GHPS21, GPS23]. **Predictability** [DCAA21]. **Predicting** [BPS18, BPM21, MAM<sup>+</sup>22]. **Prediction** [ACC<sup>+</sup>22, DPG20, HHYT24, LGLG19, QRS<sup>+</sup>23, RH23, WCC<sup>+</sup>20, ZYLZ23]. **Preferences** [FNCO20]. **Presence** [LKT<sup>+</sup>22]. **Preserving** [BMVS16, Tan22]. **Priority** [MKW20]. **Privacy** [GKR16, NKTB20, Tan22]. **Privacy-NKTB20**. **Privacy-Aware** [GKR16]. **Privacy-Preserving** [Tan22]. **Private** [KCY22, SGA<sup>+</sup>23]. **Probabilistic** [Wer21]. **Probe** [LGLG19, PLHC19]. **Problem** [CDFP21, LH22, STZ<sup>+</sup>20]. **Problems** [BCC<sup>+</sup>23, EP20, MICNC21]. **Procedural** [ZSBA21]. **Process** [BASM21]. **Process-based** [BASM21]. **Processing** [CCBS18, EEP16, HBH<sup>+</sup>21, KS15, ZYW<sup>+</sup>21]. **Producing** [BMNP16]. **Products** [EP20]. **Programming** [PWH21]. **Progressive** [PMMK22]. **Projection** [Pet21]. **Promoting** [PB22]. **Protecting** [GDSB16]. **Providers** [QKZU20]. **Proximity** [EP20, GDSB16, GHPS21, MAM<sup>+</sup>22]. **Proximity-Based** [GDSB16]. **Public** [HKK<sup>+</sup>19].

**Quality** [LNK<sup>+</sup>21]. **Quality-of-position** [LNK<sup>+</sup>21]. **Quantification** [HKK<sup>+</sup>19, WFL<sup>+</sup>23]. **Quantifying** [LKT<sup>+</sup>22]. **Queries** [ATS<sup>+</sup>16, ALM24, AAGS22, CCBS18, DCY<sup>+</sup>18, EEP16, GHPS21, GPS23, MH19, NLC16, TLV<sup>+</sup>22, ZYW<sup>+</sup>21]. **Querying** [KTY<sup>+</sup>18].

**R** [MUUR22, XWG<sup>+</sup>22]. **R-CNN** [MUUR22]. **R-tree** [XWG<sup>+</sup>22]. **Range** [ACS19, RYYH23]. **Rank** [DCY<sup>+</sup>18]. **Rapid** [ADV<sup>+</sup>22]. **Raster** [Wer21]. **Rate** [CB22, YSWZ18]. **Raw** [SSTN19]. **RDMA** [XWG<sup>+</sup>22]. **RDMA-enabled** [XWG<sup>+</sup>22]. **Real** [HHRR20, RZS<sup>+</sup>22, RRW22]. **Real-time** [HHRR20]. **Real-World** [RZS<sup>+</sup>22]. **Realistic** [JSL<sup>+</sup>20]. **Recommendation** [RRW22, ZWT<sup>+</sup>20]. **Recommender** [PK16]. **Rectifying** [LLC<sup>+</sup>22]. **Recurrent** [DPG20]. **Reducing** [ACC<sup>+</sup>22]. **ReFGeM** [ZSFB20]. **Region** [WK18, WGJT23]. **Regionalization** [ALM23]. **Regions** [MF15, UMR<sup>+</sup>23]. **Registration** [DV23]. **Regression** [SMM19]. **regressive** [ZGP19]. **Regrets** [CSKB19]. **RegRocket** [SMM19]. **Regularity** [DCAA21]. **Reimagining** [WFL<sup>+</sup>23]. **Relations** [BDW18, SPKS16]. **Release** [NKTB20, SGA<sup>+</sup>23]. **Relevance** [DHQ<sup>+</sup>21]. **Relevant** [EEP16]. **Remote** [DPG20]. **Replication** [HKK<sup>+</sup>19]. **Representations** [PAB<sup>+</sup>16]. **Representative** [ZSFB20]. **Resolution** [ACS19, MAM<sup>+</sup>22, RZS<sup>+</sup>22, CB22]. **resource** [LH23]. **Resources** [BPM21]. **Response** [ADV<sup>+</sup>22, PB22]. **Restore** [BMNP16]. **Retrieval** [MIF17]. **Reverse** [DCY<sup>+</sup>18, HYL16]. **Review** [KSR23]. **Ride** [CKT<sup>+</sup>19, GKR16, JSL<sup>+</sup>20]. **Ride-Hailing** [JSL<sup>+</sup>20]. **Ride-Sharing** [CKT<sup>+</sup>19]. **Ridesharing** [MH19]. **Risk** [LA19, RZS<sup>+</sup>22, RLA19]. **Riso** [SS21]. **Riso-Tree** [SS21]. **Road** [BM20, JSR<sup>+</sup>22, KPS17, KTY<sup>+</sup>18, MIF18, PLHC19, RHJC19, WLL<sup>+</sup>19, YHT<sup>+</sup>23]. **Robust** [BMNP16, DPKW19, KPS17, SFGK23, YHT<sup>+</sup>23]. **Rocks** [BDKS19]. **Rounding** [BMNP16]. **Route** [CN20, DPKW19, MIF17]. **Routes**

[FHK<sup>+</sup>18]. **Routing** [ALSA23, CSKB19, DV21, MICNC21, NT18, PYJM23, SFGK23].

**Salesman** [LH22]. **Sampling** [YSWZ18]. **SARDINE** [DPG20]. **Scalable** [ALM24, ALM23, SMM19, SS21]. **Scale** [BXKR23, LCKQ20, AT23, CB22, ZSBA21]. **Scanners** [RYYH23]. **Scenarios** [SNBS22]. **Scenes** [ROOF17]. **Scheduling** [RHJC19]. **Schematization** [BMVS16, CDFP21]. **Scores** [RZS<sup>+</sup>22]. **SCPP** [BASM21]. **Search** [AKM21, HYL16, TYZO15]. **Searching** [LH23]. **Section** [Are21]. **Selection** [CN20, TYZO15]. **Self** [DPG20, SGA<sup>+</sup>23, ZYLZ23]. **Self-Adaptive** [DPG20]. **Self-supervision** [ZYLZ23]. **Self-tuning** [SGA<sup>+</sup>23]. **Semi** [ZWT<sup>+</sup>20]. **Semi-supervised** [ZWT<sup>+</sup>20]. **Sensing** [DPG20, HKK<sup>+</sup>19, MR21, MRC22, ZTC<sup>+</sup>22]. **Sensing-Assisted** [HKK<sup>+</sup>19]. **Sensing-based** [MRC22]. **Sensor** [BPM21]. **Sensors** [BDKS19, TLF<sup>+</sup>20]. **Sensory** [LL24]. **Seq2Seq** [WCC<sup>+</sup>20]. **SeqST** [WCC<sup>+</sup>20]. **SeqST-GAN** [WCC<sup>+</sup>20]. **Sequence** [CCB<sup>+</sup>22]. **Sequence-to-sequence** [CCB<sup>+</sup>22]. **Sequences** [PWH21]. **Series** [LZLL20]. **Server** [TSK15]. **Server-Assigned** [TSK15]. **Service** [QKZU20]. **Set** [DV23]. **Sharing** [CKT<sup>+</sup>19, GKR16]. **Shortest** [CFWW20, JS19]. **Sight** [BCJ<sup>+</sup>23]. **Signal** [HBH<sup>+</sup>21, MKW20]. **Signalized** [MKW20]. **Significance** [AKAM17]. **SIGSPATIAL** [Are19, Are21, Are23a, Are23b]. **Simplification** [BMVS16]. **Simulating** [PSTT16]. **Simulation** [FYZ<sup>+</sup>22, LH17, SNBS22]. **Simulations** [BXKR23]. **SIRTEM** [ADV<sup>+</sup>22]. **Small** [LGLG19]. **Smart** [DBB20]. **SmarterROUTES** [DV21]. **Smoothing** [BDKS19]. **Snap** [BMNP16]. **Snapshots** [MF15]. **Social** [ASJ<sup>+</sup>23, AKM21, AAGS22, GDSB16, HYL16, PK16, YÖR20]. **Social-Spatial** [AAGS22]. **Solution** [DV21]. **Solutions** [Pet21]. **Solve** [STZ<sup>+</sup>20]. **Solving** [CDFP21, QRS<sup>+</sup>23]. **source** [ZYLZ23]. **sourced** [HBH<sup>+</sup>21]. **Space** [SOdB<sup>+</sup>20, TKC17, ZYW<sup>+</sup>21]. **Space-Time** [SOdB<sup>+</sup>20]. **Spaces** [HKK<sup>+</sup>19]. **Spark** [WMPH19]. **Sparse** [KTHK19]. **Spatial** [ATS<sup>+</sup>16, AH17, AAGS22, BPS18, BXKR23, BCC<sup>+</sup>23, BASM21, BM22, CCA23, CCBS18, CN20, DAGM21, FDMW20, KSR23, LH17, MR21, PAB<sup>+</sup>16, SPKS16, SS21, TLV<sup>+</sup>22, TSK15, TL20, VTSD18, VBME21, WMPH19, YKC20, ZSFB20, ZSBA21, ZYLZ23, ZCLR16, ZGP19]. **Spatial-Textual** [CCBS18]. **Spatially** [ADV<sup>+</sup>22, SSSJ24]. **Spatially-Aware** [SSSJ24]. **Spatio** [ALM24, AWD<sup>+</sup>18, BPM21, CCB<sup>+</sup>22, DPG20, HHYT24, LL24, Val22, WMPH19]. **Spatio-Temporal** [AWD<sup>+</sup>18, BPM21, DPG20, WMPH19, ALM24, CCB<sup>+</sup>22, HHYT24, LL24]. **Spatio-textual** [Val22]. **Spatiotemporal** [AKRH19, AKAM17, BDKS19, CEGH17, ISNU17, PAB<sup>+</sup>16, RZS<sup>+</sup>22]. **Special** [Are19, Are21, Are23a, Are23b, Gol19, MXZY22, YKC20, ZAG22, ZGA22]. **Speed** [JJN22]. **Spread** [ASJ<sup>+</sup>23, BDS22, HWD<sup>+</sup>23, LH17, MAM<sup>+</sup>22, ZAG22, ZGA22]. **Square** [Pet21]. **Stage** [LH22, LLJ<sup>+</sup>23]. **STAR** [CCA23]. **Static** [PMMK22]. **Stationarity** [DCAA21]. **Stationary** [LH23]. **Stationary-resource** [LH23]. **Stay** [UMR<sup>+</sup>23]. **step** [WCC<sup>+</sup>20]. **Stepping** [KTHK19]. **STICAP** [HHYT24]. **Stochastic** [ARF19, PYJM23]. **Stone** [KTHK19]. **Stop** [TKC17]. **Stop-by** [TKC17]. **Storage** [TPZ15]. **Straggler** [BXKR23]. **Strategies** [WLL<sup>+</sup>19]. **Stream** [CCA23, HHR20]. **Streaming** [AKM21, DAGM21, UMR<sup>+</sup>23]. **Streams** [AH17, BDKS19]. **Street** [AFHW15]. **String** [KTY<sup>+</sup>18]. **Structure** [GHPS21, LH23, SGA<sup>+</sup>23, Wer21]. **Structures** [RJ24]. **Study** [BDS22]. **Sub**



[GPS23]. **Sub-Trajectory** [GPS23]. **Subdivisions** [BMVS16]. **Subtrajectory** [TDPT20]. **supervised** [ZWT<sup>+</sup>20]. **supervision** [ZYLZ23]. **Supporting** [GHPS21]. **Surface** [KS15, LLC<sup>+</sup>22]. **Surrounds** [BDW18]. **Survey** [JZZ<sup>+</sup>22, ZXTZ24]. **SWARM** [DAGM21]. **Symbolic** [GVD15]. **Synthetic** [WCM20]. **System** [CCA23, KCY22, MRC22, RYYH23]. **Systematic** [RJ24]. **Systems** [ARF19, DAGM21, Gol19, PK16, SS21, YKC20].

**Target** [DV23]. **Task** [CN20, LCKQ20]. **TDEFSI** [WCM20]. **Techniques** [MR21]. **TEE** [KCY22]. **Temporal** [AKM21, AWD<sup>+</sup>18, BPM21, DPG20, HWD<sup>+</sup>23, WMPH19, ALM24, CCB<sup>+</sup>22, HHYT24, LL24]. **Terrain** [ALSA23, FAMF16, ROOF17]. **Terrains** [LA19, RLA19]. **TerraNNI** [ABM16]. **Testing** [ADV<sup>+</sup>22, BCJ<sup>+</sup>23, LKT<sup>+</sup>22]. **Tetrahedral** [FDMW20]. **Textual** [CCBS18, Val22]. **Thematic** [VTSD18]. **Theory** [WCM20]. **Theory-guided** [WCM20]. **Throughput** [LCKQ20]. **Tile2Vec** [LLJ<sup>+</sup>23]. **Tilewise** [KS15]. **Time** [EP20, JJN22, LGLG19, LZLL20, PB22, RRW22, SSZ23, SOdB<sup>+</sup>20, HHRR20]. **Time-varying** [SSZ23]. **Top** [ALM24, CCBS18, PAB<sup>+</sup>16]. **Top-** [CCBS18, PAB<sup>+</sup>16]. **Top-k** [ALM24]. **Topological** [PSD<sup>+</sup>21, ZGP19]. **Tracing** [JZZ<sup>+</sup>22, KCY22, LKT<sup>+</sup>22, MXZY22, Tan22]. **Tracking** [KPS17]. **Tracks** [FHK<sup>+</sup>18]. **Traffic** [CSKB19, HHRR20]. **Trajectories** [CKM<sup>+</sup>21, GHPS21, GVD15, KTHK19, KTY<sup>+</sup>18, MAK<sup>+</sup>18, MIF18, SSTN19, Val22, YSWZ18]. **Trajectory** [GPS23, KCY22, NKTB20, QRS<sup>+</sup>23, TPZ15, UMR<sup>+</sup>23, ZWT<sup>+</sup>20]. **Trajectory-based** [KCY22]. **Transit** [BBS19, MKW20]. **Transportation** [AWD<sup>+</sup>18]. **Travel** [JJN22, LGLG19]. **Traveling** [LH22].

**Treatment** [EP20]. **Tree** [SGA<sup>+</sup>23, XWG<sup>+</sup>22, SS21]. **Trees** [FDMW20]. **TRIFL** [TPZ15]. **Trip** [MH19, ZWT<sup>+</sup>20]. **Trips** [RHJC19]. **Trusted** [KCY22]. **tuning** [SGA<sup>+</sup>23]. **Turbo** [LCKQ20]. **Turbo-GTS** [LCKQ20]. **Two** [HHRR20, LH22]. **Two-Stage** [LH22]. **Two-stream** [HHRR20]. **Type** [BM20]. **Type-based** [BM20]. **Typical** [FRV<sup>+</sup>22].

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