Demographic Survey Questions

For simplicity, we present each question following the conventions below: multiple choice question with a single answer (○), multiple choice question with multiple answers (□), open question with a text field for answering (Text Field), questions with a numeric field with accepted answers between 0 and 100 (#). In addition, if clarifications or instructions were provided for a question, they will be presented after the question in italics between parentheses.

i) *How many years of experience in software development do you have?*
  #

ii) *How many papers have you published related to ML? (ML: Machine Learning)* #

iii) *How many papers have you published related to SE without involving ML? (ML: Machine Learning, SE: Software Engineering)* #

iv) *How many papers have you published related to ML4SE? (ML: Machine Learning, SE: Software Engineering, ML4SE: ML for SE)* #

v) *How many papers have you published related to SE4ML? (ML: Machine Learning, SE: Software Engineering, SE4ML: SE for ML)* #

vi) *What venues (journals/conferences) do you tend/prefer to publish in? (Please, separate each venue with a comma (,))* Text Field

vii) *How would you describe your primary role?*

  ○ Researcher (academics)   ○ Researcher (industrial)
  ○ Applied Scientist ○ Tester   ○ Project Manager ○ DevOps Engineer
  ○ Programmer ○ Project Lead ○ IT Manager ○ Other

viii) *What is your highest level of education?*

  ○ Did not graduate from high   ○ Some college ○ High school
     school
  ○ Bachelors' degree ○ Master's degree ○ Doctoral degree ○ Other

ix) *Which programming languages have you frequently used in past project(s)? (If more than an additional language is added, please split them with ";")*

  □ C/C++   □ C#   □ Java   □ Javascript
  □ Julia   □ Python   □ R   □ Rust
  □ Dart   □ Kotlin   □ Other

x) *Which types of Learning approaches have you used?*

☐ Supervised ☐ Semi-supervised ☐ Reinforcement learning

☐ Unsupervised ☐ Other [____]

xi) *What types of ML tasks have you used?*

☐ Regression ☐ Clustering ☐ Machine translation

☐ Object detection ☐ Transcription ☐ Anomaly detection

☐ Other [____]

xii) *What types of systems have you developed involving ML?*

☐ Operating systems ☐ Server side ☐ Mobile applications

☐ Middleware ☐ Desktop applications ☐ Web applications

☐ Databases ☐ Recommender systems

☐ Development tools (compilers, prog.languages, Other [____] etc.)

xiii) *Have you primarily worked on open-source or closed-source projects?*

○ Open-source only ○ Closed-source only ○ Open and closed-source

xiv) *For which domains (e.g., banking or healthcare) have you developed applications/systems? (List them next separated by coma (,))* [Text Field]

xv) *Do you have a background in machine learning? (Formal (college classes, degree, certification) or informal (self-learning or other training)?)*

○ Yes, formal ○ Yes, informal ○ No

xvi) *Do you have a background in software engineering research? (Formal (college classes, degree, certification) or informal (self-learning or other training)?)*

○ Yes, formal ○ Yes, informal ○ No

xvii) *When researching software engineering, do you keep track of your approaches/ models + dataset?, Which versioning systems have you used (e.g., CML, DVC, Git)?*

○ Yes [____] ○ No

xviii) *How often did you release or help release a new major version of ML models over the past two years? Please give your best estimate.*

○ Never ○ Annually ○ Quarterly ○ Monthly ○ More frequently

xix) *Which country/countries are you and/or your organization based in?* [Text Field]