A General Introduction to Game Theory: An Interdisciplinary Approach*

Your First Name Last Name[1]

Duke Kunshan University, Kunshan, Jiangsu 215316, China
your email
LinkedIn

Abstract. Submissions to Problem Set 2 for COMPSCI/ECON 206 Computational Microeconomics, 2023 Spring Term (Seven Week - Second) instructed by Prof. Luyao Zhang at Duke Kunshan University.

Keywords: computational economics · game theory · innovative education.

1 Part I: Self-Introduction (2 points)

[luyao] **instructions**

- insert your professional photo with number, title, and labels
- insert your short bio (around 100 words)
- make your name in a color that is not the default black

[luyao] **more hints** Please try to avoid rasterized images for line-art diagrams and schemas. Whenever possible, use vector graphics instead (see Fig. 1).

2 Part II: Reflections on Game Theory (5 points)

[luyao] **instructions**

- describe the major milestones of game theory by citing the original authors' seminal publications. (around 150 words)
- you must provide in-text citations by experimenting the following nabib package functions:
  - [1]
  - Neumann and Morgenstern [1]
  - Neumann and Morgenstern
  - 1947
- you must have all citations in the end bibliography using the latex functions
- you must have a .bib file uploaded that follows the *IEEE Style* strictly.
- you must have all in-text citation in hyperlink that directs us to the original source online.

* Supported by Duke Kunshan University

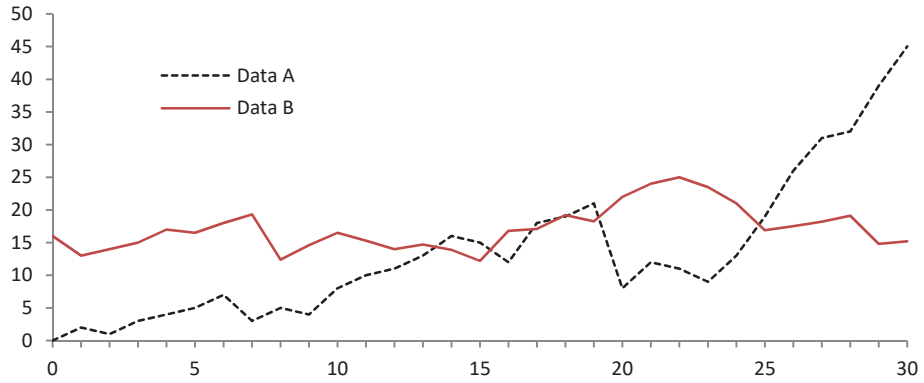

Fig. 1. A figure caption is always placed below the illustration. Please note that short captions are centered, while long ones are justified by the macro package automatically.

3 Part III: Bayesian Nash Equilibrium: Definition, Theorem, and Proof (3 points)

[luyao] **instructions**

- provide the definition, theorem, and proof from the two text books (source must be cited) on **Bayesian** Nash Equilibrium
- you must utilize the headings of subsection, subsubsection, and paragraph to structure the section
- you must use the definition, theorem, and proof environment
- you must provide basic discussions to compare the definition, theorem, and proof

[luyao] **more hints**

3.1 A Subsection Sample

Please note that the first paragraph of a section or subsection is not indented. The first paragraph that follows a table, figure, equation etc. does not need an indent, either.

Subsequent paragraphs, however, are indented.

Sample Heading (Third Level) Only two levels of headings should be numbered. Lower level headings remain unnumbered; they are formatted as run-in headings.

Sample Heading (Fourth Level) The contribution should contain no more than four levels of headings. Table 1 gives a summary of all heading levels.

Definition 1 (Nash Equilibrium). *type definition here*

Theorem 1. *This is a sample theorem. The run-in heading is set in bold, while the following text appears in italics. Definitions, lemmas, propositions, and corollaries are styled the same way.*

Proof. Proofs, examples, and remarks have the initial word in italics, while the following text appears in normal font.

fghj

4 Part IV: Game Theory Glossary Tables (5 points)

[luyao] **instructions**

- create a glossary table for the basic game theory glossaries by citing the original article
- you must cite the original publication that defines the glossaries (not the textbooks)
- you must at least include at least 5 terminologies in game theory literature different from the ones that I provided in the scaffolding sample.

[luyao] **more hints**

Table 1. Table captions should be placed above the tables.

Glossary	Definition	Sources
Title (centered)	**Lecture Notes**	14 point, bold
1st-level heading	**1 Introduction**	12 point, bold
2nd-level heading	**2.1 Printing Area**	10 point, bold
3rd-level heading	**Run-in Heading in Bold.** Text follows	10 point, bold
4th-level heading	*Lowest Level Heading.* Text follows	10 point, italic

$$x + y = z \tag{1}$$

Please try to avoid rasterized images for line-art diagrams and schemas. Whenever possible, use vector graphics instead (see Fig. 1).

Bibliography

[1] V. Neumann and O. Morgenstern, *Theory of Games and Economic Behavior. (Second edition.).* Princeton University Press, 1947.