Subject - Semester Author

# G-S Algorithm

```
1: procedure Gale-Shapley(E, A)
        Init all e and a as free
 3:
         while \exists e \text{ s.t. } e \text{ free } \land \exists a \text{ on its } P(e) \text{ list do}
 4:
              {\sf choose}\ e \in E
 5:
              \mathbf{while}\ e\ \mathsf{has}\ \mathsf{open}\ \mathsf{slots}\ \mathbf{do}
                  make offer to next applicant a \in A on e's
     preference list
                  \quad \text{if } a \text{ is unmatched } \textbf{then} \\
 7:
 8:
                       Match e with a
                   else if a prefers e to their current employer
     e' then
10:
                       Unmatch a and e^{\prime}
11:
                       Match e with a
12:
13:
                   cross a off e's preference list
14:
              end while
15:
         end while
16:
         report the set of matched pairs as the final mat-
    ching
17: end procedure
```

### Subsection

This is a subsection

### Subsubsection

This is a subsubsection

Left

## Table Example

| Header 1     | Header 2     | Header 3     |
|--------------|--------------|--------------|
| Row 1, Col 1 | Row 1, Col 2 | Row 1, Col 3 |
| Row 2, Col 1 | Row 2, Col 2 | Row 2, Col 3 |
| Row 3, Col 1 | Row 3, Col 2 | Row 3, Col 3 |

Right

# **Boxed Equation**

 $E = mc^2$ 

### Input

## **Image**