

Results

| | Col 1 | Col 2 | Col 3 | Col 4 | Col 5 |
|--------|----------|----------|----------|-----------|-----------|
| Row 1 | (0, 810) | (0, 874) | (0, 898) | (0, 898) | (1, 967) |
| Row 2 | (0, 720) | (0, 898) | (0, 898) | (0, 898) | (1, 997) |
| Row 3 | (0, 690) | (0, 898) | (0, 898) | (0, 874) | (0, 874) |
| Row 4 | (1, 901) | (0, 786) | (0, 874) | (0, 788) | (0, 788) |
| Row 5 | (1, 891) | (0, 712) | (0, 788) | (0, 788) | (0, 750) |
| Row 6 | (1, 795) | (0, 732) | (0, 750) | (0, 718) | (1, 743) |
| Row 7 | (0, 720) | (0, 718) | (0, 718) | (0, 686) | (1, 870) |
| Row 8 | (0, 529) | (0, 686) | (1, 823) | (0, 576) | (0, 686) |
| Row 9 | (0, 686) | (0, 686) | (1, 821) | (0, 578) | (0, 686) |
| Row 10 | (0, 655) | (1, 730) | (0, 607) | (0, 655) | (0, 622) |
| Row 11 | (1, 703) | (0, 568) | (0, 622) | (0, 622) | (0, 601) |
| Row 12 | (1, 653) | (0, 576) | (0, 601) | (0, 663) | (1, 811) |
| Row 13 | (0, 542) | (0, 663) | (0, 663) | (0, 699) | (1, 884) |
| Row 14 | (0, 541) | (0, 699) | (0, 699) | (1, 724) | (2, 1122) |
| Row 15 | (0, 386) | (0, 735) | (0, 697) | (1, 742) | (0, 679) |
| Row 16 | (0, 697) | (1, 821) | (0, 600) | (0, 697) | (0, 697) |
| Row 17 | (0, 625) | (1, 779) | (0, 498) | (0, 625) | (1, 761) |
| Row 18 | (0, 516) | (0, 625) | (0, 601) | (1, 662) | (0, 567) |
| Row 19 | (0, 601) | (0, 601) | (1, 616) | (2, 1144) | (0, 863) |
| Row 20 | (0, 649) | (0, 606) | (1, 634) | (0, 605) | (0, 695) |
| Row 21 | (1, 803) | (0, 614) | (0, 695) | (0, 695) | (0, 741) |
| Row 22 | (1, 780) | (0, 729) | (0, 741) | (0, 741) | (1, 895) |
| Row 23 | (0, 614) | (0, 741) | (0, 784) | (1, 954) | (0, 641) |
| Row 24 | (0, 784) | (0, 784) | (0, 839) | (1, 850) | (0, 835) |
| Row 25 | (0, 839) | (0, 839) | (1, 849) | (0, 836) | |

Table 1: Sequence of atrial events occurred during simulation

1 Discussion

Table 1 is the sequence of atrial events obtained for the simulation of RL agent with enforcer setup.

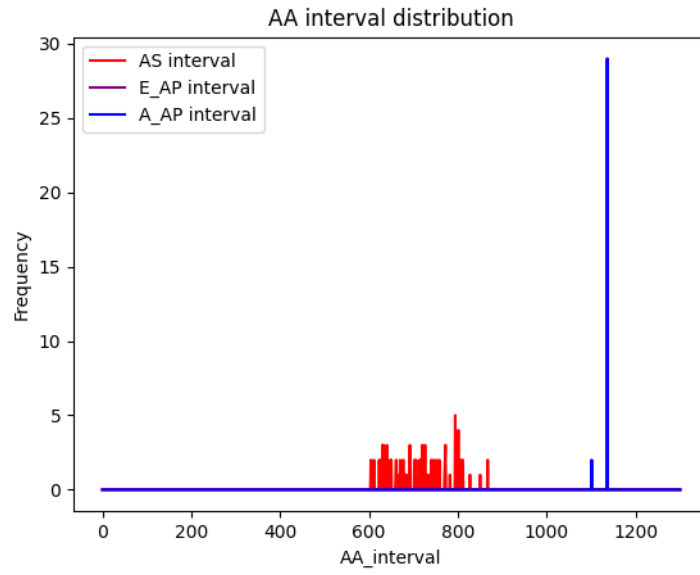


Fig. 1: Frequency over A-A interval for traditional pacemaker

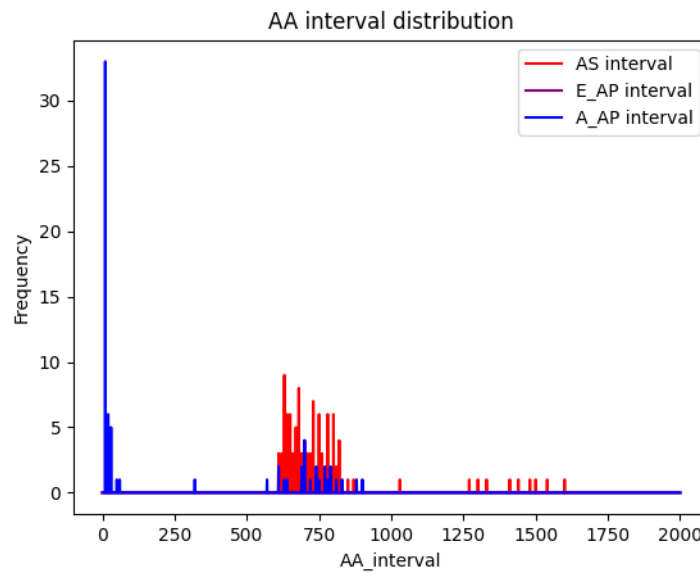


Fig. 2: Frequency over A-A interval for RL-based pacemaker without enforcer

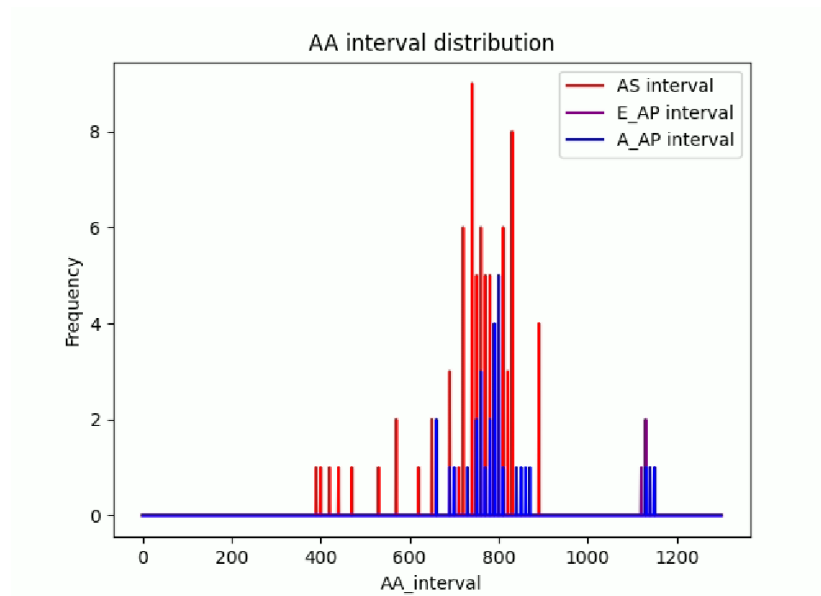


Fig. 3: Frequency over A-A interval for RL agent with enforcer and optimization