Let us consider a control system, where, on the base of the observed output, we can find a controller $u(t)$, which, in turn, acts on the controlled plant. The equations of the system are:

\[\begin{align*}
0_A & = -A_Z^0 + \sum B(t)Z_A(t) \\
\dot{Z}_A & = C(t)X(t) + D(t) + (t)
\end{align*}\]

where $Z_A$ is a vector of unknown parameters, $C(t)$ and $D(t)$ are known matrices, and $X(t)$ is a vector of unknown states. The output of the system is obtained by the following equation:

\[\begin{align*}
0_A & = -A_Z^0 + \sum B(t)Z_A(t) \\
\dot{Z}_A & = C(t)X(t) + D(t) + (t)
\end{align*}\]

The observed output is an output vector $y(t)$, which is measured by the following equation:

\[0_A = C(t)X(t) + D(t) + (t)\]

The observed output is an output vector $y(t)$, which is measured by the following equation:

\[0_A = C(t)X(t) + D(t) + (t)\]

The system under consideration is given by the following differential equation:

\[0_A = C(t)X(t) + D(t) + (t)\]

where $X(t)$ is a vector of state variables of the system.

The objective of the problem is to design a controller that minimizes the cost function $J$, which is given by:

\[J = \int_0^T \left( \frac{1}{2} (X(t)^T P(t) X(t) + U(t)^T Q(t) U(t)) \right) dt\]

where $P(t)$ and $Q(t)$ are positive definite matrices.

The introduction of the paper is as follows:

**Introduction**

The problem of optimal control of linear stochastic systems with quadratic cost function has been extensively studied in the past. The main findings are:

1. The optimal control is a feedback control, given by:

   \[u(t) = -K(t)X(t)\]

2. The Riccati equation is:

   \[\frac{dP(t)}{dt} = A^T(t)P(t) + P(t)A(t) - P(t)B(t)R(t)^{-1}B(t)^T(t) + Q(t)\]

3. The steady-state gain $K$ is obtained by solving:

   \[\begin{align*}
   \frac{dP(t)}{dt} & = A^T(t)P(t) + P(t)A(t) - P(t)B(t)R(t)^{-1}B(t)^T(t) + Q(t) \\
   P(t) & \to \textit{steady-state}\end{align*}\]

The paper concludes with a summary of the main findings and future directions for research.
\( Z_0 = (0,0) \)

Equations (1) and (6) are combined to an augmented system equation:

\[ X = (0,0) \]

Results

Contraints of dimensions n and \( n + n \) for \( n \) and \( n \) are respectively.

The model includes as special cases the optimal controller of a direct link \( (A) = (0) \) and \( (a_0) \) from a controller without the observed output \( (A) \) and the control signal \( (A) \). The model includes a direct link with a direct link being connected to an arbitrary integral value \( z \) and \( t \) respectively.

Where \( z \) is a vector of an arbitrary integral value \( z \) and \( t \) are respectively.

\[ X = (0,0) \]

\[ Y = (0,0) \]

Assume the following form of the controller:

\[ \gamma(t) = (0,0) \]

The proposed solution is to use the accurate model of the system to find the controller of the system.

The quadratic cost function value close enough to the optimul value obtained for the controller of the system.

To be estimated is arbitrary, but we have proven that this arbitrary choice does not.

Lensure the final error covariance of the estimate \( z(t) \)

\[ z(t) = (0,0) \]

where \( z(t) \) and \( z(t) \) are the initial time and final time respectively, and \( z(t) \) is an unknown matrix solution to the equation:

\[ (A) = (0,0) \]

With the desired output \( r(t) \) and \( \gamma(t) \) for \( t \leq t \).
The optimal controller problem is to solve the stochastic system. To transform the stochastic system, we may obtain for example the following equation:

\[ x(k+1) = \Phi x(k) + \Gamma u(k) + \eta(k) \]

where \( x(k) \) is the state vector, \( u(k) \) is the control input, \( \Phi \) is the state transition matrix, \( \Gamma \) is the input gain, and \( \eta(k) \) is the noise vector. The objective is to find a control law that minimizes the cost function:

\[ J = \int_0^\infty (x^T Q x + u^T R u) \, dt \]

where \( Q \) and \( R \) are positive-definite matrices. The solution is given by the Riccati equation:

\[ P(k) = A^T P(k+1) A - A^T P(k+1) B (R + B^T P(k+1) B)^{-1} B^T P(k+1) A + Q \]

The solution to this equation is:

\[ x(k+1) = \Phi x(k) + \Gamma \left( u(k) + K e(k) \right) \]

where \( K \) is the gain matrix obtained from the Riccati equation. The controller can be decomposed into the following way:

\[ \begin{bmatrix} x \end{bmatrix} = (1)^x \begin{bmatrix} 0 \end{bmatrix} + (1)^x \begin{bmatrix} z \end{bmatrix} \]

\[ \begin{bmatrix} y \end{bmatrix} = (3)^y \begin{bmatrix} 0 \end{bmatrix} \]

\[ \begin{bmatrix} u \end{bmatrix} = (3)^u \begin{bmatrix} 0 \end{bmatrix} \]

\[ \begin{bmatrix} z \end{bmatrix} = (3)^z \begin{bmatrix} 0 \end{bmatrix} \]

where

\[ \begin{bmatrix} e \end{bmatrix} = \Phi e(k) + \Gamma u(k) + \eta(k) \]

\[ e(k) = \begin{bmatrix} 0 \end{bmatrix} + \begin{bmatrix} 0 \end{bmatrix} + \begin{bmatrix} 0 \end{bmatrix} \]

\[ \begin{bmatrix} y \end{bmatrix} = \begin{bmatrix} 0 \end{bmatrix} + \begin{bmatrix} 0 \end{bmatrix} + \begin{bmatrix} 0 \end{bmatrix} \]

\[ \begin{bmatrix} u \end{bmatrix} = \begin{bmatrix} 0 \end{bmatrix} + \begin{bmatrix} 0 \end{bmatrix} + \begin{bmatrix} 0 \end{bmatrix} \]

\[ \begin{bmatrix} z \end{bmatrix} = \begin{bmatrix} 0 \end{bmatrix} + \begin{bmatrix} 0 \end{bmatrix} + \begin{bmatrix} 0 \end{bmatrix} \]
The national convention of electrical and electronic engineers in Israel

suggested to the solution of the whole problem, and a detailed complete program was developed.

Because of the problems of use and efficiency, a numerical approach is necessary. The use of matrices and linear algebra is to be used in this type of problem. The matrices are not necessary at all. In this case, the state controller is not necessary.

The matrices are not necessary, and the solution will be to solve the problem. Some of these problems can be solved in the case of two-dimensional systems, and a steady-state controller is used. Therefore, we prefer a steady-state controller. An approximate solution for the controller is used. After solving the matrix, an approximation for the controller is used.

Hence:

\[
\begin{bmatrix}
L_1 & T_1 \\
\cdot & \cdot
\end{bmatrix} = \begin{bmatrix}
\cdot & c \\
\cdot & \cdot
\end{bmatrix}
\]

\[
L_1 = d
\]

\[
\begin{bmatrix}
L_1 & T_1 \\
\cdot & \cdot
\end{bmatrix} = \begin{bmatrix}
\cdot & d \\
\cdot & \cdot
\end{bmatrix}
\]

\[
T_1 = d
\]

\[\]
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In the meantime, the system is reconfigured and it

resulting value of the cost function for any given system and any given controller does not show the controller and the cor-

It computes the matrices $K$, $P$, and $K'$ of the optimal steady state controller and the cor-

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